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I. THE RELIGION OF THE AIMOL KUKIS.

By

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J. K. BOSE, M. A.

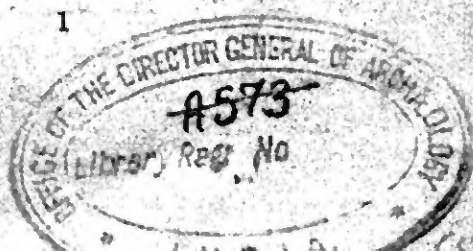
(Research Fellow, American Museum of Natural History).

Introduction.— It is useful at the outset to enquire into the relationship between the environment and the religious beliefs of these people. In an interesting monograph¹ by G. T. Renner (junior) the ecological aspects of religion have been brought out specially in relation to the primitive people, who are placed in the Tropical Forests. The habitat of the Kukis is of the same nature as of the Lhota Nagas of Assam described as living in the tropical forest clearings. The adjustment to the forest of the Aimols, leads to their religious conception of the spirit of Ram-Pathian representing as it were the vague awe that seizes them in the depth of the jungle. Being forest agriculturist they believe that the forest is full of spirits like the Jujus of the Nigerians and

¹ *Primitive Religion in the Tropical Forest, A study in Social Geography*, by G. T. Renner (junior) M. A., Columbia University, 1927.

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offerings to their highest god are made in the depths of the jungle, where they build a hut. Similarly flooded rivers being an affair of the greatest concern to them, they worship the water deity Tui-Pathian who is also supposed to bring misfortune and disease to them. Of the forest fauna the tiger is feared but it is never killed, a feature common to other tribes in this area. There are presiding deities of the harvest and annual agricultural rites at the beginning of the harvest season. The clearing of the forest is the most important asset of their life and their favourite implement the 'Dao' is worshipped. Moreover after burial the spirit of the *dao* is supposed to drive away the spirit of the dead buried outside the village in the uncleared forest. The village also has a protecting deity 'Kho-Pathian' and there is also a protector of the household. Thus environment and the occupational activities brought forth by it, help to determine some of their religious beliefs and customs.

The following is a sketch of the religious beliefs and ceremonials of the Aimol Knkis as actually observed. A detailed analysis and comparison would follow later after a general survey of all the Old Kuki Tribes. The religious beliefs of the different Kukis are not exactly identical. The Kuki tribes of the southern area in the Lushai Hills as described in detail by N. E. Parry in the case of the 'Lakhers' seem to possess different names for their Supernatural Beings. The beliefs of the Nagas are also dissimilar.

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'Pathian' is more or less a widely distributed term specially amongst the Kukis. The Thadou Kukis believe that life is given to everything by Pathian who rules the universs and is supposed to be beneficent having little concern with msn. Belief in the existence of a Supreme Being is found amongst the Kachins, Chins, Lahus and Karens of Burma who are their neighbours. Amongst many of the Naga Tribes such as the Angamis and Aos, there is also the notion of a Supreme Being. To call it mere nature worship or dismiss it as animism would lead to the overlooking of many of its complex features. There are spirits which are thought to have abodes in the different departments of nature, for instance there is the water spirit 'Tui-Pathian'; but if it had been mere nature-worship there would have been corresponding spirits of the fire or of the earth or of the sky.

They have also the notion of a Supreme Being who is generally kept in the background, and 'Pathian' is the general term corresponding to God. If we consider with Durkheim that religion is essentially a product of social organization, we find it amply exemplified in the case of the worship of 'Bungtay Pathian' who has gradually assumed the superior position of a High God, being the object of veneration of the superior moiety—Chonghom and Chonghomlaita. So also 'Selling Pathian' who is worshipped by the next two phratrises of the inferior moiety—Lauoo and Chai-thu, has a similar position amongst these two.

Supreme Beings.—There are two high gods known as 'Bungtay Pathian' who is worshipped by the members of the Chonghom and Chonghomlaita, and 'Selling Pathian' who is worshipped by the other group Lanoo and Chaithn. Their idea is that these gods are benevolent towards them and they created all things of this world. A tradition runs thus:—One day when a man was returning from the forest he saw an old man sitting on a stone and as he was approaching towards him, the old man vanished. The man returned to the village and related the whole story to the priest who recognised the old man as 'Bungtay Pathian'. So from that time onwards they worship a stone in the jungle and maintain a hut for the shelter of the stone.

In the month of December these two gods are worshipped on the same day. On the day of worship the whole village is divided into two halves, in one half the members of the Chonghom and Chonghomlaita and in the other the members of Lanoo and Chaithn are assembled. The priest with three assistants of the Chonghom and Chonghomlaita goes towards the forest with a pig, a hen and some pots of zu. Here in the jungle they first build a small hut and then a stone is placed within the hut (generally the old stone which is worshipped from generation to generation is placed, but if it be not found in that place then a new stone is placed); they can not clearly say why the stone is erected and they do not give any importance to it after the

worship. Then the priest, after chanting some incantations, sacrifices those animals and keep some portions of their ears, noses their heads and legs with some pots of zu (rice-heer) before the God and returns to the village with the remainder. After that, these things are cooked and distributed to all persons in hits. When this is over they all assemble in one place and the whole day is spent in dancing and music. The members of Lanoo and Chaithu on that day never take anything from the other groups and do not join in their amusements.

On the other hand the members of Lanoo and Chaithu arrange worship for their God 'Selling Pathian'. The arrangement of the worship of this God is made in the house of the priest. All people assemble at the place and the worship is performed within the house of the priest with the sacrifices of a pig and a hen. When the worship is finished these things are cooked and taken by all the men of the group in small quantities. Zu is constantly supplied to all persons and music and dancing are going on in full swing for the whole day. No member of the other group is allowed to join in this worship. The whole village is at 'genna' and no stranger is allowed to enter the village on that day. The music and dancing are also made in separate places within the village by the two groups. In the 'Kha Aimol' village this ceremony has practically lost its importance now-a-days.

Kho Pathian (Village-deity).—This is the village deity and this is worshipped twice in the year,

once in the month of Tebul (January) and again in the month of Mantang (October).

The worship is generally performed in the morning at about 8 or 9 o'clock but sometimes it may be performed in the evening. 'Khulpu' (chief priest) officiates as the priest. The place of sacrifice for this deity is reserved near the village gate. Here a plot is cleared and on the clean spot a bamboo pole of nearly four feet is kept slanting on the ground and a cotton string is attached to it with a lump of cotton at the end. This is the symbol of 'Kho Pathian' (in the Unapal Village). Before the day of worship the village officers who are in charge of collection, collect from every house of the village some materials for the worship. On the day of worship all persons assemble in the house of the headman. The 'Khulpu' after bathing wears a new cloth and marches in front of the party and other persons of the village follow him with a pig, a hen, an egg and a pot of zu to the place of worship. On reaching the place the 'Khulpu' chants some incantations and offer those things with a glass of water. The meaning of the incantation is "Oh God, be kind on us and keep all the people of the village in happiness. By Your grace we are all alive and living in peace".

When this is over, they all return to the village with those sacrificial things and a feast is arranged on the occasion and the whole day is spent with music and dancing.

Inn Pathian (household deity).

This is the house deity of every family and in each house this deity is to be found. At the time of building the house a place in the south-eastern corner of the house is reserved for this deity. The symbol of this deity consists of three baskets placed on a plank nearly five feet above the ground. One of the baskets is conical and a long pole is attached to it from the ground and the other two baskets are flat. The conical basket is placed in the middle and the other two baskets are placed on both sides of it. This deity is worshipped in case of minor troubles of the person. The 'Thempoo' (ordinary priest) generally officiates as priest and for his service he gets a basketful of paddy, a pot of zu and a portion of the sacrificial meat. On the day of worship some leaves are tied on the upper beam of the door of the house indicating that some worship is going on within the house and no one except the inmates of the house is allowed to enter. The worship is made by the 'Thempoo' in the morning and a pig or a hen is generally sacrificed. The pig is offered to the deity by piercing it by a sharp bamboo-split; iron weapons are never used for this sacrifice. After the sacrifice some portions of the meat and zu are placed on those baskets and the priest takes a portion as his share. The family members are at 'genna' and they do not join in any work of the village on that day.

Ohahon (the presiding deity of the field).—This is the deity of the fields and by the worship

of this deity they get abundance of crop. This deity can be worshipped only in the presence of the people of the superior moiety but the people of the inferior moiety can take the sacrificial meat. The place for residence of this deity is made near the village gate where a circular piece of land is cleared and surrounded by a bamboo hedges. In it are kept the various symbols of the deity and the things for worship. Generally a small house is made and within it two baskets full of earth with various small plants are kept, outside the house there are some bamboo and glassas, and water glasses, and baskets to keep rice and meat after the worship. They think that after the annual worship the soul (pitay) of various plants take these offerings and are pleased on them so they get abundance of crop and cotton and other cereals from the fields and jhums.

The worship is performed in the month of Thaur (July) and 'Khulpu' the chief priest of the village officiates as the priest. On the day of worship all the village officers engage themselves in the making of those symbolical things and in the afternoon they start with those things towards the village gate; the 'Khulpu' marches in front of the party with a red turban. When they reach the place the 'Khulpu' with his assistants first clear off the old things and replace them with new ones. Then the 'Shumpu' and the 'Tangba' (Village officers of lowest rank) sacrifice a pig and two cocks respectively, both at the

same time The pig is pierced with a bamboo knife and cocks are sacrificed by a *dāo*. Then a portion of these meats are put in the small baskets and the glasses are filled with zu and water.

After the sacrifice the priest invokes the deity with the following incantations:—

Chang jongo nishama
Karomunhai kadachongahoi
Chapita yeungro chohongro
Taitaktiang nilurna chahongro
Napunikang tulimpura patro
Naputpua putro
Nikheia kanakai
Thakoi kanakai
Arthara kanakai
Boklaichuma kanakai
Chapita hongro.

"Oh, God of fields, we are invoking thee and offering thee pig, cocks and zu. Do thou be kind on us and take all these offerings. The souls of all directione (east, west, north and south) be ye kind on us and take this humble offering of this people."

After finishing this they return to the village. Here in the house of the 'Khulpu', the sacrificial meat is cooked and all persons of the village take bits of this meat and a quantity of zu which is generally supplied by the 'Khulpu'. On this day no one is allowed to go out of the village and no strangers are allowed to enter the village.

Malevolent Spirits.(I) *Tui Pathian* (Water Spirit).

Evil spirits which very often brings misfortune to the people, are appeased by them. *Tui Pathian* is the chief of evil spirits. When a man is seriously ill and he has no chance of recovery then the worship of *Tui Pathian* is arranged, because the people think that the only way to save that man's life is to appease *Tui Pathian* who has got greater control over the evil spirits who cause sufferings to the people. A date is fixed by the 'Thempoo' and in the morning of that day the 'Thempoo' with two assistants known as 'Thomloi', goes to the river side with a white cock, a roll of cotton thread and some pots of zu. On reaching the place they make two figures of clay, one in the shape of a male known as 'Riathal' and another in the shape of a female known as 'Dongma'.² These two figures are placed by the side of the water and in front of these figures a cotton thread is twisted on four sticks planted on the ground so as to enclose a square place in the middle plot. The 'thempoo' then sacrifices the white cock and keeps portions of the head, the two legs, entrails and the two wings with those pots of zu. Then they return to the village. On their way home they put a thread across the ditch just after crossing the village gate-way. Their idea is that the diseased man's soul will return

² The worship of *Tui Pathian* with symbolic human figures is probably taken from the Manipuris, because in no other worship do the Aimols make any human figure.

by crossing the ditch by the help of the thread and the mao will be alive again.

(2) *Chuan Pathian.*

This is the evil spirit which cause is believed to all sorts of illness and for this reason at the time of illness they try to appease the spirit by offering sacrifices. On hearing of a man's illness, the 'Thempoo', with his assistants carries a pig, a hen, and some pots of zu near the village gate. There, after the sacrifice they put the meat on seven plantain leaves with some pots of zu and after finishing this they return to the village. The members of the house of the diseased person are at 'genna' on that day, but other villagers may do their work as usual. This spirit is also worshipped when they are at war with another village.

(2) *Lamdoi.*

This is a forest spirit who acts under the orders of 'Chuan Pathian' and is generally responsible for a case of minor illness.

Shongkat Pathian.

This is the spirit of 'dao'—the hand weapon of the Kukis, and is worshipped in the month of Wochong (February). The worship is performed just near the village gate, where all the daos of the village are gathered. The 'Thempoo' then comes with a pig and some pots of zu. The pig is sacrificed and is cooked on the spot. The persons present on the occasion get some bits of the sacrificial meat and zu. No stranger and women are allowed to be present on the occasion and the

sacrificial meat is never taken to the village. This worship of the spirit of *daos* is performed just before the season of *jhum* in order to avoid any injury on the persons of the people when they will work for the preparation of the *jhum*.

Another important function is also performed by 'Shongkot Pathian'. On their way home after a burial, the people worship this spirit in order to avoid the evil spirits who haunt the grave and follow the persons to the village. So just outside the village gate a *dao* is placed with the sharp edge towards the burial place and all men who went to the burial ground stop just in front of the *dao*. The 'Thempoo' then chants some incantations and beats every person with the leaves of 'tumbel' and 'numphiar' (leaves of wild plants) as they cross the *dao*. The idea is that the progress of the evil spirit is retarded by the spirit of the *dao*.

Arkun Pathian.

This is the deity who is worshipped when a pregnant woman is in trouble. Barren women also worship this deity for a child.

The worship of 'Arkun Pathian' is made at three or four o'clock in the morning. The priest comes with an assistant on the day of worship. First, they dig two holes in the courtyard of the house and pitch two pieces of bamboo about two feet in height, then another bamboo of the same size is tied to these bamboos crosswise. Two pieces of plantain-leaves are spread on each side of the posts with one egg on each. Two pots of *zu* are

also kept on them. Then the priest, facing east, with two red coals in his two hands with a stooping posture mutters the following incantations:—

Ah — ha — Pathian

Andurai andukan shemdurai shemdukan

Neshoknoo nikhoiya thakohoya

Nakhungmoo ashen nargirmoo ashen

Dungmar asha khangmar asha

Thing resha pahoi asha

Thangching arkhouna arkhang

Robo aphur ashanga

Thinsiat thopaymaro lungghiat thopomaro

Nanasit tiaking nantao timaking

Oitang chanoo nashum pero

Ati thingshi thomerolungshiat thomero

Do-Pathian andurai andukan

Semdurai sedukan.

The general meaning of the above incantation is that we are invoking Thee for the welfare of the woman who is suffering from serious trouble. Oh, God, do be kind on her by accepting these offerings and relieving her of her pains.

After this the priest sacrifices the coals, and the meat is cooked and is taken by the suffering woman. Men are not allowed to be present at the time of the worship.

Minor Deities.

(1) *Shor Pathian.*—Sometimes this spirit is invoked with the sacrifice of a hen and a pig and

a blue baad of cotton is tied round the wrist in order to avoid the evil eye of some malevolent spirits.

(2) *Rangelshen*.—This is the spirit who is believed to control the rains; but is of importance attached to the worship of this spirit.

There are other minor deities and spirits such as 'Ram Pathian' (Jungle God), 'Nisha Pathian' (Soo God) and 'Arshi Pathian' (Moon God) etc. who are all generally benevolent towards them and so the Aimol does not arrange any worship for them.

—:00:—

II. FOOD AND DRINK IN ANCIENT INDIA.

BY RAI BAHADUR JAGES CHANDRA RAY, M. A.

(Concluded from Vol. XIII. No. 4, p. 239.)

Kaṭilya has given a highly interesting chapter on provisions (II. 15), not found elsewhere. I give here the account with my notes.

(1) *Dhanya*,—Cereals and pulses. These were husked by pounding, rubbing between stones, or grinding. The cereals were cooked in three forms, as *anna* when the grain remains entire and separate as *Kulmāsa*, porridge, and as *Yavaka*, often called *yāvagu*, gruel. Probably millets were cooked as porridge. Barley was prepared as gruel. Hence the name, *Yavaka*, of *yava*. Pulses were cooked as *supa*, soup. Sometimes some were kept moist to induce germination and then eaten, while a few like pea were fried in dry heat, perhaps on heated sand as now. *Laja*, fried rice in the paddy was of course prepared in like manner.

Note.—We learn that a meal for an Aryan, freedman, consisted of about 12 oza. of entire and cleaned rice and its quarter weight of pulse, beehee meat and vegetables. There is no mention of wheat, Chapaka, or Chīṇaka. *Chamati*, meal of dry *māsa*, was probably used for making *vaṭi*, pills. *Balaka*, seed-coat of pulses, was given to cattle. From the preceding chapter it will appear that the staple food of the Rīgvedic Aryana was barley. As they proceeded eastwards, *Vrihi* became as important as barley. Further east, rice

replaced barley. In Bihar, as we have seen in Kanṭilya and Sus'rnta, barley became unimportant and wheat more so. The superiority of wheat as an article of diet was well recognized but it never formed the staple food. Dhanvantariyanighaṇṭu described it as the food of the Yavanas, the Greeks; and later by the 16th cent. it had acquired the name, Yavana. Besides the cereals, milk and its products and meat formed a great part of the daily meal. Since the Rig-vedic times 'dhānā' has been the name of roasted barley and 'S'aktu' that of its meal. It was rubbed with *ghi* and mixed with honey and water to a thick consistency and eaten. The preparation was known as 'mantha', when S'aktu was mixed with 'dadhi', the Bulgarian milk, it was known as 'Karambha'. Probably salt or honey or both were added to it. 'Apūpa' or 'Pūpa' was bread of unfermented barley meal and possibly of Priyangu and latterly of wheat meal also. The most prized food was 'pnrodās'a. It was a large cake of Vrihi cooked on earthen basins. It was cut into pieces, dipped into *ghi* and eaten. It was the As'upithā of Bengal, as'n being Vrihi, but the method of preparation was different. Another delicacy was 'Charu', composed of Vrihi or barley cooked in milk over slow fire with frequent sprinkling of *ghi* and constant stirring with a flat piece of wood so as to prevent sloppiness. Charu was 'pāyasanna', 'pāyas' being milk, the grains remaining distinct. As a common variety of diet two or more articles of food were mixed and cooked together, having *tila* in 'Kṛsara', *mudga*

in 'mudga-anna', 'pala' meat in 'pala-anna' etc. 'Havieya-anna' was originally 'anna' of Nivara and other wild corns. Since these were not always available, it consisted of rice, barley, *priyangu*, *mudga*, *kalaya* and *tila* and oowe' *ghi*, again reminding us of the earliest food-grains of the Sanjana.

(ii) *Sneha*,—oils and fats. These were 'sarpi' (*ghi*), 'taila' (vegetable oil), 'vasa' (fat), and 'majja' (marrow) of animals.

The sources of vegetable oil and the proportion of each obtained from seeds are given as follows:—(a) oil, one-sixth of the volume of the seed,—*Atasi*, linseed, (b) oil, one-fifth the volume,—*Nimba*,—*Melia azadirachta*, *Kus'amra*, better known as *Kus'amra* and, in Bengal, *Kosam* or *Kusum*, the famous lac-growing tree of dry forests,—*schleichina trijuga*. *Kapittha*, a misreading for *Karanja*,—*Pongamia glabra*. (c) Oil, one-fourth the volume,—*Tila*,—*Sesamum*, *Kusumbha*, safflower, *Madhuka* (*Mahua* in vernacular),—*Bassia latifolia*; *Ingudi*, the famous 'Tapasatara' of Smakrit literature, and *Hingan* of Bihar,—*Balanites roxbunghii*.

Note:—All the oils mentioned above are not edible. *Nimba* oil has a powerful smell and bitter taste, so also the oil of *Karanja*. In the text it is written *Kapittha* which is *Feronia elephantum*, whose seed is neither oily nor numerous. The seed of *Karanja* contains 25% of oil which is largely used for burning lamps. The name occurs in Vedic literature. The oil of *Kosamra* often

contains a small proportion of Hydrocyanic acid. The oil of Ingudi is bland, yellow and tasteless. It is to be noted that Sarsapa was not pressed for oil, and the Tila oil was the oil *par excellence*. The name occurs in the Atharvaveda. Charaka has the following edible oils:—Tila, Eraṇḍa, or castor oil,—*Ricinus communis*; Sarsapa; Piyāla,—*Buchanania latifolia*; taṣī; Kusumbha. Suśruta gives a long list of oils and discusses their medicinal properties. Bhaviṣya Purāṇa mentions Khasa-vija, poppy seed, and gives its properties but says nothing about its oil.

(iii) Lavaṇavarga,—Salts. There were two sources of common salt, 'Saindhava', the rock-salt of the Sindhu, Indus country, the Punjab, and 'samudra', the sea-salt. There were four other kinds of salts stored for use. These were (1) 'bid', a black salt of offensive odour, hence the name, prepared by heating together 'udvedaḥ' salt with Haritakī,—*Terminalia chebula*; (2) Yavaksara, 'the alkali from yava', potash; (3) Sauvarchala, 'the glistening or fire-producing', salt-petre; (4) Udvedaḥ, 'formed on soil', commonly known now as 'reh' (from Samskrit ruḥaka, salt-petre) a mixture of sodium salts occurring as efflorescence on soil.

Note.—The Saindhava salt is the purest natural salt, containing over 99% of Sodium chloride. This explains the reason of its being considered pure in Hindu dietary; moreover, it is not prepared by unclean castes by whom the sea salt is prepared.

Charaka has Saindhava, Sauvarchala; bid; and bhida, the same as Udvedaḥ; Kāla lavaṇa; a

black ealt without odour (probably prepared by mealing together Saindhava and Haritaki.) Samndra; pams'u taken by Bh. P. as a name of Audvida. Pams'u is dust, and salt was obtained from alkaline soil. Sus'ruta and Amara add 'Romaka', 'of Rome' foreign, which was Samhhara, the salt lake of Ajmer. (Was Sus'ruta revised when Rajputana was in the possession of the Greeks?)

(iv) Kaṭuka-varga.—Pungents and condiments. These were Pippali, long pepper; marīcha, black pepper; Sringivera or Ādraka, ginger; Ajaje or Jiraka, cumin seed; Kirata tikta, being Chireta,—*Swertia chirata*; white Sarsapa; Kustumburu, commonly known as Dhanyaka, Dhaniya, coriander; Coraka?; Damanaka, Beng. Dana,—*Antemisia vulgaris*; maruvaka, Beng. marua,—*Ocimum basilicum*; S'igrukaṇḍa, the stem [bark] of Beng. Sajina,—*moringa plerygospermum*.

Note.—One of the names of marīcha is Dharmapattana, of 'Dharmapattana', the name of a place, probably in Bihār. It is surprising that Chirata was used to prepare a bitter curry. There was Kālas'aka, especially known as Sraddhas'aka, the green herb eaten on the occasion of S'raddha. Bh. P. takes it to mean the bitter Nāḍika, the bitter Jute plant,—*Corchorus olitarius*. It is mentioned as Nārī in Charaka among the green vegetables. It owes its name to its tubular stem. There is no mention of Paṭola,—*Trichosanthes dioica*, whose leaf is often used as a bitter. The name occurs in Charaka. It is also noticeable that Haridrā, turmeric, does not find place in Kau-

tilya's stores, though it was known to him (II. 12) It is difficult to make out Charaka: It is strongly aromatic so that the smell was believed to drive away evil spirits, a property commonly ascribed to Damanaka also.

Charaka gives some other names, such as Yamani, Beng. Joan,—*Carum copticum*; S'aleya, or madhurika, Beng. mauri, fennel; Karavi, Beng. S'a-jira,—*Carum subscastanum*; Hingu, Beng. Hing, asafetida, and a few others. The names occur also in Amara.

(v) Ksara-varga.—Sugar products derived from the juice of the sugar cane, as 'phanita', syrup, 'gufa', solid lump obtained by drying up the juice by heat; 'matayandi', crystals with syrup; khandā, unrefined crystals, and 's'arkara', refined crystals.

Note.—The word, ksara, usually means an alkali, so-called from the fact that an alkali like soda is obtained by allowing a watery mixture of an alkaline earth to trickle down. The juice of the sugar-cane similarly trickles down from sugar mills. This use of the word, Ksara has become obsolete. For detailed description of the sugar products, vide *Sugar Industry in Ancient India*.—J. B. O. R. S. Dec. 1918.

(vi) Madhu.—Honey from bees and grape-juice.

Note.—It is interesting to note that grape sugar was considered allied to honey. Charaka refers to sugar obtained from honey, and names four species of honey-bees.

(vii) *Phalamla*.—Fruit sour. These were *Vrik-samla*, tamarind; *Karamarda*, Beng. *Karamcha*,—*Carissa carandas*; *Amra*, mango; *Vidala*,? *Amalaka*,—*Phyllanthus emblica*; *matulunga*, Beng. *Taba*,—*Citrus medica*; *Kola* and *Vadara*,—round and long fruit of *Zizyphus vedgaris*; *Sauviraka*, 'the fruit of the sauvira country' the lower Sind, Beng. *Narikeli kul*,—*Zizyphus jujuba*; *Parusaka*, Beng. *Phala*,—*Gravia asiatica*.

Note,—*Phatamla*, a special name of tamarind, heads the list. The name, *Vidala*, is perhaps a misreading for *Vidala* which *Manu* mentions. *Vidala* (IX. 130) which is evidently rattan cane denotes a species of *Vetra*,—*Calamus* whose sour fruit is eaten by the poor. *Charaka* and *Sus'ruta* mention a large number of sour fruits, in addition to those mentioned by *Kautilya*. The following are well-known—*Amrataka*, Beng. *Amra*,—*Spondias mangifera*; *Bhavya*, Beng. *Chalta*,—*Dillenia speciosa*; *Kapittha*, Beng. *Kayet*,—*Feronia elephantia*; *Lavati*, Beng. *Nor*,—*Cicca disticha*. *Sus'ruta* adds other names, such as *Lakucha*, which was known to *Kautilya* as a tree on which *Tasar* silk worms grow,—*Artocarpus lakoocha*; *Karkandhan*, a wild *Zizyphus*, (the name occurs in Vedic literature); *Prachinamalaka*, Beng. *Panjala*,—*Flacourtia cataphracta*; *Kos'arar*, Beng. *Kos'am* whose unripe fruit is very sour and sometimes eaten by the poor; etc.

(viii) *Dravamla-varga*.—Sour drinks, such as 'dadhi', and *Dhanyamla* or *Kanji*, prepared by fermenting cooked rice and other grains in water, consists of a dilute solution of acetic acid.

(ix) S'ukta-varga.—Vinegar. It is prepared by fermenting one of the following: Juice of the sugar-cane; guṛa; honey or grape juice; syrup; Jambava fruit of *Eugenia jambolana*; Panasa, jack-fruit; to which a decoction of the leaf of mesa'sringī,—*Gymnema sylvestries* and Pippali, long pepper, has been added. It is stated that the process will take a month, six months or a year.

Asnta.—Pickles are prepared by fermenting in water slices of the sugar-cane, and putting in the liquid slices of fruits of Chidbhita,—*Cucumis sp.*, urvāru,—*Cucumis sativars*, mango, or Āmalaka, *Embelio myrobolan*.

Note.—Vinegar was obtained also from breweries as 'amlas'idhu', sour a'idhu (II. 25). The leaf of mesa-s'ringī is said to be stomachic. Medical writers would sometimes add edible rhizomes as adjuncts.

(x) S'aka-varga.—Vegetables and the like consisting of rhizomes, roots, fruits, and meat and dried fish.

Note.—The word, s'aka denotes vegetables which are cooked for food. These are derived from six parts of plants,—root, rhizome, stem, leaf, flower, and fruit. Occasionally other parts are eaten, e. g. the growing shoot of the bamboo, edible mushroom. Kauṭilya, like Charaka divides the S'aka into two classes, viz. those parts which are above ground, and those which are under ground. The former include flowers and fruits, and the latter root and rhizome. Kauṭilya and Charaka had a third class, 'haritake' the greens which were eaten raw. Kauṭilya does not say anything of the

Royal orchard. But he incidentally names the fruits which were common in his part of the country. Vedic literature does not tell us whether mango and jackfruit were at all known to the Vedic Aryans. The only fruits mentioned are Karkandhu, Āmalaka, Vilva,—*Egle marmelos*, and Kbarjūra, date. Besides the fruits mentioned above we have in Kauṭilya under timber trees Tala, the palmyra palm, and Rājādana, or Piyāla. There is no mention of cocoa-nut and plantain, Charaka mentions cocoanut, and also Āruka; Beng. Ālbo-khāra,—*Prunus communis*; Tada, mulberry, Nagaranga, orange and a few others of minor importance. From Kauṭilya's list of provisions it appears that fruits did not form a part of the daily dietary of the ancients.

In the time of Kauṭilya meat and fish formed items of daily diet. Fresh fish was apparently insufficient to meet the demand, and dried fish, perhaps salted and smoked, was consumed. Certain birds such as the pea-cock, parrot and maina were held sacred; and gone, water-hen, Brahminy duck were excluded from the table. It is curious to note that Kauṭilya a shrewd and accurate observer believed in the existence of 'matsya', sea-animals, having resemblance with the elephant, horse, ass, and man (II. 26). Such aquatic animals were not killed for food. There were large forests, not very far off the town, where mrigapās'n quadrupeds, were hunted after. Amarakosa gives a list of these, which belong to many families. The King had flock of sheep and goats, droves of swine, and

herds of cattle and buffaloes. The latter were meant for various purposes, one of which was to supply meat. Oxen were bred and probably fattened for the shambles (II. 29). S'us'ruta describes beef as "pure". Yajñabalkya in his *Dharmaśāstra* (200 A. D.)? enjoins the offering of beef to Brahmins learned in the Vedas when they come as guests (I. 100). *Viṣṇu Purāṇa* (II. 15) tells us that if one feeds Brahmins on the day of S'raddha with beef, the souls of deceased parents remain satisfied for eleven months. Kaṭṭilya refers to the custom (IV. 3), and the ceremony of Vrisotsarga, letting loose an ox at S'raddha, had its origin in this old precept. The fixing of a sacrificial post and the offering of four extra valves show what the intention was. Manu (III. 267) enjoins the feeding on the day of S'raddha of Brahmins with meat and offering them some intoxicating drink, and permits the killing of birds and quadrupeds for the performance of sacrifice and the eating of meat if the animal has been offered to a god. Female animals were never permitted, and one would naturally select a sound animal. The goat was usually the *pas'u*, the sacrificial animal, and so was *Kriśṇasāra*, which is a goat.

The relative estimation of the different kinds of food can be inferred from the statement in Manu that an offering of *Vrihi*, barley, *māsa* and *śila* together with *S'aka*, vegetables keep the ancestors satisfied for a month; the fish, *Pathina*, Beng. Boal, the cat-fish, for two months; the flesh of *Hariṇa*, gazelle, three; of sheep four; of

game birds five; of goat six; of Priṣata, the spotted deer, seven; of Ēṇa, antelope, eight; of Ruru, the barking deer, nine; of boar and buffalo ten; of rabbit and turtle eleven; of ox twelve months, and of rhinoceros twelve years. A similar list is given in Uśanas Samhitā in the same order (III). It is difficult to guess why the flesh of rhinoceros was so much prized. Perhaps it was a rare animal, and difficult to kill. The name is Vadhriṇasa; which means a rhinoceros (cf. Viṣṇu Purāṇa III. 17. Kṣīrasvami's com. on Amara under Khadga, and Halayudha's Dict.). The flesh of Gavaya, — *Bos frontalis*, was also prescribed. In horse-sacrifice proclaiming victory over the four quarters the flesh of the sacrificed horse was eaten. The last sacrifice was performed by Samudragupta in 400 A. D. The last reference to beef-eating is found in Bhavabhūti (800 A. D.). Had it been a taboo the poet would have hesitated twice before describing the feast in detail.

III. Drink

Kautilya and medical writers included all kinds of intoxicating liquors under 'madya', also called 'madirā' derived from the word, 'mada', intoxication. Accordingly 'surā' was a class of 'madya', Manu (xi) divides 'surā' into three kinds, viz., (1) Paistī, made from 'piṣṭa', the meal of cereals, (2) Gaudī, from 'guḍa', the dried up juice of the sugar-cane, and (3) madhvī, from 'madhu', honey. The name 'surā' was especially applied to Paistī,

which Manu described as the sediment of rice and the like. In this all authorities agree. And we have therefore no doubt that the 'sura' of the Vedic Aryans was rice-beer.

Manu regarded the drinking of 'sura' as one of the greatest sins that a Brahman might commit, and his main reason rested on the fact that it was obtained by the decomposition of rice. Probably he had another fact in view. It was manufactured by a low caste who were untouchable. He therefore enjoined also on the Ksatriyas and Vais'yas abstention from the drink. From Kauṭilya, S'ukra, the two epics and the Purāṇs it appears that these two classes and the kings did not observe the rule. The 'Vastu Sāstras' on the building of houses point out a place suitable for the Royal Drinking Saloon. Kauṭilya, however, made drinking penal for Brahmans, who if found guilty were branded on the forehead with a mark resembling the flag of the brewery, ¹ and banished to the mines. It was not a sin for the Śūndras to drink. They appear to have been habitual drinkers. From Kauṭilya it appears that women and girls did not indulge in drink, and were therefore employed in their manufacture, (cf. S'ukra's disparaging remark regarding this in Madhyadesa).

Sura was the commonest liquor, and Kauṭilya did not think it necessary to specify it. One of its forms was 'prasanna', and another 'śveta sura'. The latter was the result of distillation. In Anirakosa a synonym of 'sura' is 'parisruta', that

¹ It seems the flag depicted the distiller's still, see Manu, XI, 91-93.

which trickles down. Therefore one may fairly infer that 'sura' was often distilled. A liquor shop was known as 'āpana', a drinking place. It was also called 's'undā. The word, s'undā means the trunk of the elephant, and meant also the distilling apparatus, the alembic, on account of resemblance. Hence Sunḍi came to mean a distiller. Another name was 'Kalya-pāla', 'Kalya' being 'good-oheer'.

Before we enter into a description of the various liquor in use in India, it will be useful to make a few preliminary observations regarding the general method of manufacture. It is easy to induce acetous fermentation in cooked rice, and some of our house-wives know how to prepare 'Kanji', rice vinegar. But the art of preparing Kanji of superior quality is not known to all. It requires two to three months to finish the process. Similarly, the art of inducing alcoholic fermentation in honey, grape juice or treacle may appear easy, for these when somewhat old become naturally fermented. But oftener than not, the fermentation is acetous, the liquid tastes sour with or without the presence of alcohol in it. The art of preparing alcoholic drinks consists in the suppression of acetous fermentation which would result in the loss of alcohol. The conversion of sugar into alcohol is due to the action of a ferment, a microscopic plant, floating in the air along with a host of others (*vide* Appendix II). It has therefore to be isolated as in the preparation of sweet dadhi, and once the 'seed' is obtained, it can be kept up with a little care. But the art of pre-

paring alcohol from rice and other cereals is much more difficult and requires long practice. The starch contained in them is first converted into a kind of sugar, and the latter into alcohol. In Europe the whole grain, often of barley, is soaked in water and allowed to germinate, the starch is thereby converted into a sugar, and once this is obtained, the next process is the same as in honey. As far as I know the Indian method consists in mixing softened rice with a ferment, 'Kinva', which has the power of changing starch into sugar, and the latter into alcohol, the two changes going on simultaneously.²

The same method is adopted by the Santals, Kōls, and other aboriginal tribes who prepare their own beer at home, chiefly from rice and sometimes from millets, such as māṇā,—*Eleusine*, and so on. The beer is known as Nāṇḍā or Pāchui. Cleaned rice is partially cooked over fire in a Hāṇḍi, an earthen cooking pot. It is next taken out, cooled and thoroughly mixed with powdered 'Bākhar', the 'Kinva' of Sanskrit and put again in the Hāṇḍi with a small quantity of water, sprinkled on the top to prevent drying. The mouth is covered, and the Hāṇḍi set aside. In about three days in summer and six or seven days in winter, the Hāṇḍi is ready. The grains of rice lose their shape and become pulpy. The whole mass is strong in alcohol, and few drinkers can stand it. Usually the alcohol is removed by washing the pulp with water, leaving a residue

² [vide appendix I.]

of empty coats, cellulose of the original grain. This was known as 'bakkasa'. The liquor drawn off looks like milk and is sometimes distilled. The name, 'bāṇḍiā', is given to it because it is prepared in a ḥaṇḍi, and 'pāchui' because it is the result of decomposition, agreeing with Manu's description. Fermentation cannot take place without 'bakhar'. The word, 'bakbar' is a corruption of Sanskrit 'balkal', the bark of plants. 'Bakhar' is sold in markets in small white balls, and the manufacturers keep the ingredients secret. The method is, however, known. Roots and barks of various plants are pounded and cold infusion in water is made of them. Rice meal is mixed with the liquid and made into balls. Somehow or other the special ferment, *Mucor*, finds its way in the balls and remains there. Probably it is added to the meal from an old stock. The quality of bakhar depends upon the presence and number of the organism. In a manufactory it is necessary to know the strength, and the use of a standard quality is economical.

Kautilya's brewer prepared the 'Kṛṇva' himself instead of relying on supply from outside, though it was a market commodity (II. 22). Hence Kautilya has given us a recipe: "Mix one part of powdered māṇa-pulse, cooked or uncooked with three parts of powdered rice along with small quantities of Moraṭa, etc. This will be 'kṛṇva-bandha', the binder of the body of the kṛṇva". Moraṭa is *Mūrva*,—*Sonseriera zeylanica*. But this alone is not sufficient, and Kautilya is

silent about the rest. He mentions the ingredients required for 'bīja-bandha', the binder of the 'seed', in another connection, and these were used in making bākhar.

While giving recipes for the liquors of his time, Kautilya classifies them according to their source. Thus:

(i) Medaka, prepared from rice, kiṇva and water, and kiṇva being $1\frac{1}{2}$ times and water 8 times the volume of rice.

Note.—Of course water was not added at first. The proportion of Kiṇva used in the preparation shows that it was a quickly fermented liquor. The name, 'medaka', *lit.* looking like fat, does not occur in Āyurveda. Suśruta mentions 'jagala', *lit.* meaning the pulpy sediment of eura, that which dissolves. Amarakosa took 'Jagala' and 'medaka' as synonyms or allied preparations.

Evidently the pulpy mass was sometimes eaten, after adding 10 different kinds of spices to give the beverage its distinctive taste, flavour, and colour. These were Pāṭha,—*Stephania hernandiflora*.; Lodhra,—*Symplocos racemosa*; Tejovati or Mūrvā; Elavāluka, often spelt Elabāluka, a kind of scented drug; honey; Madhurasā, grape; Priyāngu,—*Aglais roxburghiana*; Daru-haridrā—*Berberis asiatica*; black and long pepper. These are not all spices, and it will be seen that some correctives or medicinal drugs were always added to the different kinds of liquors.

(ii) Prasanna, made from 'piṣṭa', meal of cereals, kiṇva and water, kiṇva being one-tenth of the meal.

Note.—It is apparant Prasannā would take much longer time "to ripen" than Medaka and the result would be repellant and distillation necessary. To clarify and colour it, 'kaṭa s'arkarā', alnm, and a decoction of the flower of *Bassia latifolia* would be added. The latter would sweeten the taste and colour the liquor. The clear liquid on the top would be prasannā, which means 'clear'. At the time of setting up the vat, Putrāka,—*Putranjiva roxburghii* was always added to the mixture. Somtimes eight other vegetable ingredients were added after ripening. These were Coca,—cinnamon; Citrak,—*Plumbago zeylanica*; Viḍanga,—*Embelia ribes*; Gaja-pippali—*Scindapsus officinalis*; Kramuka and Lodhra,—two allied species of *Symplocos*; Madhuka,—*Bassia*; Musta,—*Cyperus rotundus*. When the wort was distilled, the result was called s'veta-surā, white surā, on account of the colour of the distillate. The eight ingredients would be added to it also. The same eight, it appears, formed 'trijabandha', the binder of the seed of kiṇva.

This method of preparing surā is applicable to all kinds of cereals, many of which will require powdering in order to remove their coat. Hence the name 'Piṣṭa', the meal, and surā-paṣṭi. the liquor from the meal. A better and quicker method is to soften the cleaned grains with water over heat, as in the preparation of medaka. After mixing with kiṇva, the softened grains are made into flat cakes for conversion of their starch into sngar. The cakes are piṣṭaka, hence the piṣṭika surā.

The strength of surā would of course depend upon the proportion of water used. Kautilya tells us that the maximum quantity of surā which was allowed to a consumer was 6 ozs, while the minimum would be as small as $\frac{3}{4}$ oz. It seems surā was pretty strong in alcohol.

(iii) Āsava, from treacle, to which wood apple and a small quantity of honey were added. Apparently honey was old and contained the yeast ferment. Sometimes the eight ingredients of Prasannā were added to Āsava. It was never distilled.

(iv) Arista used to be prepared according to the direction of physicians, and was purely a medicinal beverage. The fermenting material was guda to which a small quantity of honey was added.

(v) Maireya also from guda to which was added decoction of the bark of Meshasringi, — *Gymnema sylvestre*, and sometimes the three myrobolans. All liquors from guda usually contained the myrobolans. Maireya was a favourite drink of noblemen, and the name suggests that it was at first made in a country called Mirā, which is, however, unknown.

(vi) Madhu from grape was really wine. It was common in the country of the fruit. Guda was added to grape juice in places where the fruit was not abundant.

These six kinds of liquor were of various qualities depending on the proportion of the ingredients. When ripe mango was added to surā, it would be called mango-surā, and so on. There

was Mahāsura, the great eura, prepared for the consumption of the king. For this an infusion in water would be first made of the following,—*Sansveria*, *Butea frondosa*, *Datura*, *Gymnema*, *Pongamia*, and *Ficus glomeratus*, and a decoction of the following,—*Symplocos*, *Plumbago*, *Embllica*, *Stephania*, *Cyperus*, *Aguilaria*, *agallocha*, *Berberis*, *Nymphæa*, dill seed, *Achyranthis*, *Alstonia*, *Melia*, and *Jasminum sambac*. The two extracts would be clarified by the powder of borot alom and added to eura. A small quantity of treacle would also be added to make it sweet.

Of the six kinds of liquor, *surā*,—whisky, *medaka*,—beer, *arisā*,—tiecture, and *madhu*,—wine appear to have been much in demand. Maireya and Āsava were liquors; when these went sour they were called 'amla-e'idhai', and the liquid was sold as vinegar or utilized in making pickles of fruits. Stale *surā* fetched low price, and *medaka* of bad quality was either sold elsewhere, or given to slaves and labourers in lieu of their wages, or to drought animals and hogs. [So much from Kaṭilya.] Many other kinds of liquor came into use since his time. But few writers cared to tell us how they were prepared. According to Bhāvaprakāśa the difference between *Arisā* and *Āsava* lies in the fact that in preparing the former a decoction of medicinal plants is used, while in the latter plant bodies in their natural state. In both the fermenting material is usually a mixture of *guṛa* and honey. *Sīdhu* was a class of liquors,

the fermenting body of which was the juice of sugar-cane, treacle or any other sweet juice. *Sura* was prepared from cooked rice, the upper thin liquid in the *sura* vat being *prasannā*, the next layer *kadāmbari*, the next thick layer *Jagala*, and the thickest *medaka*. All the grades were included under *sura* which was evidently not distilled. The residuo left after the spirit had been drawn off by washing was called *Bakkasa*. *Varuṇi*, was the fermented juice of the palmyra and date palms. This is *Taṛi*, from *Tala*, palmyra palm. The name *Varuṇi* suggests that it was first prepared in places near the sea. It was doubtless a product of Southern India.

The intoxicating drinks mentioned by *Sus'ruta* may be classified under the three heads of *Paisti*, *Gauri*, and *Mādhvi*. To the first belonged *s'veta-sura*, *prasannā*, *Jagala* and *bakkasa*, all prepared from rice; *mādhvika* from wheat, and *kohala* from barley. *Siddh* was a general name for all liquors prepared from *gura*, and other products derived from sugarcane and also from the flower of *Bassia latifolia*. These belonged to the *Gauri* class. Under the *Mādhvi* class were *mādhvi* proper from honey, and *mridvika* from grape juice. Allied to it was one prepared from ripe date fruit. There is no mention of *Taṛi* which was apparently unknown to *Kautilya* also. *Āsava* and *ariṣa* are medicinal beverages. But *Sus'ruta* sometimes uses *sura*, *mādhvi*, and *mridvika* as the basis for his *āsava*. These preparations were therefore known by compound names such as *Sura-āsava*

It is interesting to note that the word, 'kohola', the *surā* from barley with the Arabic prefix 'al' before it is the origin of the word Alcohol. The knowledge of the Indian art of distillation of spirit spread to the West through Mahommedans.

It is not clear from the above account whether any of the inferior grains such as *Eleusine*, *Coix* and *Panicum* were used for *surā* by professional brewers. They were articles of food with the poor, and it was probably they who prepared their own beer from them. It is, however, surprising to note that the flower of *Bassia latifolia* was not in extensive use. The reason appears to be that distilled spirits were not much in vogue except *surā*, and a fermented infusion of the flower would not be palatable on account of its tannic acid. Knowledge gradually increased, and Kullūka Bhaṭṭa, a Bengali commentator of Mann (1400 A. D.) mentions besides *surā*, eleven sources of alcohol, such as, honey, *maireya*, (from *gura*), grape, flower of *Bassia*, the juice of date, palmyra and cocoanut palme and sugar cane, jack-fruit and a variety of sweet, large and round mango fruit called Tanka or Rājāmrā. It would appear that our knowledge regarding the sources has not increased since the 14th century and that the aboriginal tribes have still been preparing *surā* in the way the Vedic Āryans did in their times.

APPENDIX I.

Spirit from Rice.

[Abridged from the author's paper on the *Hindu method of manufacturing spirit from Rice*. *J. As. Soc. Beng.* (New series,) vol. II, no. 4. 1906.]

In Orissā, the bulk of the spirit consumed by the poor people is manufactured from rice. Husked rice called Ātap (i. e. sun-dried) is first of all softened in moist steam. For this purpose water is boiled in a large hāṇḍī (earthen vessel) placed over a fire. Upon the hāṇḍī is placed and luted with stiff clay another having a pretty large hole at the bottom. The hole is covered with a piece of coarse cloth, and upon this, rice previously washed carefully with water, is laid. The mouth of this second hāṇḍī is partially covered by means of a wicker-work basket. The steam from boiling water below, passing through the moist rice, softens the grains. The swollen rice is next put in a heap to complete the softening. The steaming is done in the morning. Towards evening the rice is thoroughly mixed with powdered 'bakhar' in the proportion of one to hundred, and laid aside in a heap for twenty-four hours. Next it is spread out in thick circular cakes for three or four days. The temperature rises and the grains become entangled with a growth of mould fungus. The cakes are then piled one upon another and left for four or five days. During this period the mould becomes black, and densely coats each grain of rice. The cakes are now put in earthen vats

and water added in the proportion of $2\frac{1}{2}$ parts to one of rice. The mixture is left for 8 or 10 days according to season. At the end bubbles of gas cease to come out and the upper portion appears clear. The wort thus prepared is next distilled. The apparatus consists of two large jars, one forming the alembic and the other the receiver, their heads being connected by means of two tubes of bamboo. The alembic is heated over fire and the receiver placed in a tub of water and kept cool.

The whole process takes 20 to 22 days. It will appear very primitive, though judging by results it is by no means unsatisfactory. Indeed it is based on scientific principles. The bakhar contains spores of *Mucor* fungus, and it is this which converts the starch of rice into a kind of sugar and while submerged under water in the vat the *Trulla* form of the fungus converts the sugar into alcohol. The Chinese are said to use a species of *Mucor* for the same purpose, and the Japanese another fungus as ferment for their *sake* from rice.

APPENDIX II.

Method of manufacturing spirit from the flower of Madhuka,—*Bassia latifolia*.

In some of the preparations of liquor described in the preceding pages we are directed to add *gura*. How this brings about fermentation will be clear from the following account of preparing spirit from Madhuka.

The flower is abundant in the Ranchi District of Chōṭā Nagpur and forms the only source of alcohol. The Government set up a distillery there which supplied all the spirit consumed in the District. The flower has the smell of honey, hence its Samskrit name, and contains 47% of sugar of which 23% is cane-sugar. It contains, besides sugar, tannic acid which makes treacle and liquor prepared from it unpalatable.

Seed-liquor is first prepared by keeping for sometime a quantity of *gura*, spent wash and water in an open vat. When it is ready, vats are filled with the flower, and water and a quantity of the seed-liquor are added. The contents of the vats are daily stirred. In about four days fermentation becomes complete which is ascertained from the cessation of bubbling sound due to the escape of carbonic acid gas. Next the contents are distilled in the usual way.

It is needless to add that the spent-wash supplies the required ferment which is increased in the presence of *gura*. Impure *gura* alone with water ferments in the hot season. The necessary yeast floating in the air settles in the watery *gura* and multiplies rapidly.

III. CASTE, RACE, AND RELIGION IN INDIA.

I.

Current Theories of Caste.

Social divisions graded on the basis of occupation, each with more or less solidarity of its own and observing more or less the principle of class endogamy, have existed in various countries and communities in the past as well as in the present,—among, for example, the ancient Romans and ancient Egyptians, the Russians and the Japanese of half-a-century back, and even among some modern primitive peoples like the Malagasy of Madagascar, the Maoris of New Zealand, the aborigines of some of the islands of the Pacific such as Tahiti and Hawaii, and the Carrier Indians and some other divisions of the Western Dene of North America. But nowhere do all these features—common hereditary occupation, endogamy and commensality—appear in such intimate conjunction and in such a strictly organized and rigid shape with a hereditary priestly class at the head, as they do in the Caste System of India. This is what makes the Indian Caste system an unique form of social organisation. Caste has remained the foundation of the Hindu social structure for several centuries and has given to Hindu society its distinctive character.

Divergent views have been expressed as to the process by which this unique system has evolved and the basis upon which it rests. But it cannot

be said that a final solution of the problem of Caste origins has yet been reached.

In the present Chapter, I shall give an account of the different main theories of caste propounded by modern investigators, and in subsequent chapters I shall discuss them and seek, according to my own lights, to probe into the ideas and sentiments on which this unique system is based and to trace, so far as possible, the course of its development. Barring the Hindu traditional theory which regards caste as ordained by God Himself, there are over half-a-dozen principal theories of the origin of the Caste system in the field.

1. Ibbetson's Theory.—There is, first, the occupational and religious theory of Caste, formulated by Sir Denzil Ibbetson in his *Punjab Census Report* for 1881 which was published in 1883 and republished in 1916 in a volume entitled *Punjab Castes*. In his words, "the whole basis of diversity of caste is diversity of occupation". According to him, the four *Varnas* or classes described by Manu were hardly different from the four divisions of the clerical, the military, the agricultural and trading, and the artisan and menial classes in other countries; but, as circumstances had raised the priestly class in India to a position of extraordinary power, the dominance of the Brāhmins gave abnormal importance to all distinctions of occupation. In order to exalt their office and to propitiate their political rivals and rulers, the Brāhmins degraded all occupations

except those of the priestly and ruling classes, and introduced the principle of hereditary occupation by giving religious sanction to this hereditary principle, and enjoining religious obligations of ceremonial purity and restrictions relating to food, prescribed regulations regarding intermarriage and social intercourse between different classes, and declared certain occupations and foods to be impure. Hence arose that tangled web of caste restrictions and distinctions and gradations, and ceremonial obligations and artificial rules of purity and impurity, which collectively constitute what is known as Caste.

The steps in the process by which caste has been evolved in the *Punjab* are, according to Ibbetson, as follows: "(1) The tribal divisions common to all primitive societies; (2) the guilds based upon hereditary occupation common to the middle life of all communities; (3) the exaltation of the priestly office to a degree unexampled in other countries; (4) the exaltation of the Levitical blood by a special insistence upon the necessarily hereditary nature of occupation; (5) the preservation and support of this principle by the elaboration from the theories of the Hindu creed or cosmogony of a purely artificial set of rules, regulating marriage and intermarriage, declaring certain occupations and foods to be impure and polluting, and prescribing the conditions and degree of social intercourse permitted between the several castes. Add to these the pride of social

rank and the pride of blood which are natural to man and alone could reconcile a nation to restrictions at once irksome from a domestic, and burdensome from material a point of view; and it is hardly to be wondered at that caste should have assumed the rigidity which distinguishes it in India" ¹.

Thus, in Ibbetson's theory, the origin and diversity of Indian castes, is traced mainly to community of occupations; and the hereditary form which the caste system finally assumed is ascribed to the exaltation of the priestly office in India.

2. Nesfield's Theory.—Mr. J. C. Nesfield in his *Brief View of the Caste System of the North-Western Frontier Provinces*, published in 1885, carried the functional theory a little further, and was emphatic in his assertion that "function and function alone is the only foundation of the Caste system". He maintained the theory of the racial unity of the Indian people, and controverted what he called "the modern doctrine which divides the population of India into Aryan and aboriginal". According to him "the racial amalgamation of the invading Aryan and the indigenous aborigine had been completed in the Punjab before the Hindu, who is the result of this amalgamation, began to extend his influence into the Ganges Valley, where by slow and sure degrees he disseminated among the indigenous races those social and religious maxims which have been spreading wider and wider ever since

¹ *Punjab Castes* (1918), pp. 9-10.

throughout the continent of India, absorbing one after another, and to some extent civilizing every indigenous race with whom they are brought into contact, raising the choice spirits of the various tribes into the rank of Brahman or Chhatri, and leaving the rest to rise or fall in the social scale according to their capacities and opportunities". In his view the relative order of precedence or rank of these other groups "depends upon whether the industry represented by the caste belongs to an advanced or backward stage of culture". Thus, according to him, "the natural history of human industries affords the clue to the gradations as well as to the formation of Indian Castes". At the bottom of the scale are placed "the surviving representatives of the aboriginal Indian savage who was once the only inhabitant of the Indian continent, and from whose stock the entire caste-system, from the sweeper to the priest, was fashioned by the slow growth of centuries". "The whole series of matrimonial taboos which constitute the cornerstone of the caste-system were", says Mr. Nesfield, "initiated by the Brahmans for their own benefit".

3. Risley's Theory.—In opposition to this functional theory of Caste, Sir Herbert Risley in 1891 adumbrated his racial and hypergamous theory and declared that the primary factor in distinctions of Caste was Race, that the evidence of anthropometry indicated that there were seven ² physical types among the Indian people, and that there was a close correspondence between these seven racial types and seven distinct types of Caste ³ and that "castes

varied in social rank according to the average nasal index of their members".

The white-skinned, long-nosed victorious Aryans despised the black, snub-nosed aborigines, and "though in the beginning they had to take abori-

¹ Of these the three primary types are said to be the *Dravidian*, extending from Ceylon to the Valley of the Ganges, the *Indo-Aryan* in the Punjab, Kashmir and Rajputana, and the *Mongoloid* on the border-land between India and Tibet; and the four secondary types supposed to have been formed by admixture of the three main stocks are the *Aryo-Dravidian* type of the United Provinces, Bihar, and parts of Rajputana, the *Mongolo-Dravidian* type in Bengal and Orissa, the *Scytho-Dravidian* type said to be represented by the *Mahratta* race and the *Kunbis* and *Coorgs* of Western India, and the *Turko-Iranian* type represented by the Baloch and Afghan tribes on the borderland to the west of the Indus.

² These are (1) the *Tribal castes*, composed of a whole tribe like the *Bhumij* of Chota Nagpur, the *Koch* of Northern Bengal, the *Jat* of Punjab and the *Koli* of Bombay;

(2) the *Functional or Occupational castes* like the *Dhobi* (washerman), *Barhi* (carpenter), and *Nova* (barber) castes of Northern India, the *Khandait* (soldier-caste) of Orissa, and the *Nagar* of Malabar, composed of persons drawn together by the pursuit of the same occupation and drawn from different tribes or pre-existing castes;

(3) the *Sectarian castes*, like the *Sarwak* of Orissa, the *Gharbari Akith* of Bihar, the *Jati Baishnab* of Bengal and the *Lingayat* of Bombay;

(4) *Castes formed by crossing*, such as the *Sagridpesha* of Orissa, the *Sudra* of East Bengal, the *Bona* of Assam, the *Bidur* of the Central Provinces, the *Bhillala* of Bombay, and the *Gola* of Baroda;

(5) *National Castes* like the *Marhatta* of Western Bengal and the *Newar* of Nepal;

(6) *Castes formed by migration*, like the *Sivalgir* of Midnapore and Eastern Balasore; and—

(7) *Castes formed by changes of custom and occupation* like the *Babhan* of Bihar and the United Provinces, the *Sadgop* and *Chasadhoba* of Bengal, and the *Villuban* of Madras.

ginal women as wives they would not give their women to the aborigines, and later closed their ranks to further admixture". Thus, "there naturally arose a regular gradation of social rank with communities of pure Aryan taking the precedence, those with various degrees of racial miscegenation coming behind them, and those of pure aboriginal blood bringing up the rear". The principle of endogamy was extended to groups formed otherwise than on a racial basis such as sectarian castes and hybrid castes until the modern multiplicity of castes was evolved.

In his "*People of India*" (1908) in which he discussed Senart's theory to which I shall presently refer, Risley reiterates his theory that the sense of distinctions of race indicated by differences of colour is the principle upon which the Caste-system rests, and adds—"While this sense of racial distinction was too weak to preclude the men of the dominant race from intercourse with aboriginal women, it was still strong enough to make it out of the question that they should admit the men whom they have conquered to equal rights in the matter of marriage. Once started in India, the principle, we are told, strengthened, perpetuated, and extended to all ranks of society by the fiction that people who speak a different language, dwell in a different district, worship different gods, eat different food, observe different social customs, follow a different profession, or practise the same profession in a slightly different way, must be so unmistakably aliens by blood that intermarriage

with them is a thing not to be thought of". According to Risley, the Indian intellect is marked by certain characteristic peculiarities such as its lax hold of facts, its indifference to action, its absorption in dreams, its exaggerated reverence for tradition, its passion for endless division and sub-division, its acute sense of minute technical distinctions, its pedantic tendency to press a principle to its furthest logical conclusion, and its remarkable capacity for imitating and adapting social ideas and usages of whatever origin. These must have greatly promoted and stimulated the caste instinct. It is through the Indian's imitative faculty that, according to Risley, the myth of the four castes, evolved in the first instance by some speculative Brahman, and reproduced in the popular versions of the epics has attained its wide currency as the model to which Hindu Society ought to conform. This distinguished ethnologist sarcastically adds,—“That it (*sic.*, this model) bears no relation to the actual facts of life is, in the view of its adherents, an irrelevant detail”.

4. Senart's Theory.—In 1896, M. Emile Senart in his *Les Castes dans l'Inde* put forward what has been called the family or gentile theory of Caste. According to this distinguished French Orientalist, the Indian Caste-system is the normal development of the ancient Aryan institutions of the family, the *gens* and the tribe which, says he, correspond respectively to the family, *gotra* and caste in India. He points out the existence in ancient Greece and Rome of restrictions on marriage simi-

lar to those of caste-endogamy and *gotra*-exogamy, certain restrictions regarding food and hearth-fire (such as the taboo on strangers in the family meal) and rules regarding social and religious ostracism similar to those in force among Hindu castes. While under favourable circumstances, the family, the *gens* and the tribe among the European branch of the Āryane have been absorbed in the nation,—in the Indian branch, M. Senart thinks, the peculiar conditions of their settlement in India, gave rise to the close corporations of the Caste system. These conditions are the distribution of the Indian Āryane over large areas resulting in multiplication of groups; contact with the aborigines encouraging pride of blood; the idea of ceremonial purity leading to the employment of the aborigines in occupations involving manual labour and the reservation of higher occupations for the Āryans; the influence of the doctrine of transmigration of souls according to the inexorable law of *Karma*; the absence of any co-ordinating political authority, and the great authority which the priestly class gradually acquired. As for the exclusiveness of caste, it originated, according to Senart, in family worship.

5. Ketkar's Theory.—In 1909, an Indian scholar, Dr. S. V. Ketkar, published the first part of a book named *History of Caste in India* of which the second part appeared in 1911. The theory put forward in this book is that prior to the immigration of the Rig-Vedic Āryans, India was populated by many tribes belonging to many races including perhaps some Āryan tribes who had preceded the

Rig-Vedic Āryans. All these tribes were separate communities who had not developed anything higher than tribal consciousness. With the immigration of the Āryans, there came to India a new culture which developed further in the Upper Valley of the Ganges where the Brāhman evolved first as a class and then as a sacerdotal caste. The Brāhman migrated all over India and carried the idea of four *Varnas* and tried to apply that idea to local conditions everywhere. The conditions of different localities varied and so all the four classes did not emerge everywhere. In many parts only the ruler was recognised as Kshatriya on account of his office, and when the ruling family disappeared Kshatriyas also disappeared. The Brāhman *varna* did not contain many heterogeneous elements and so they had a communal consciousness. The Kshatriyas were tribes or families of heterogeneous origin of various races entirely unknown to each other.

6. Gait's Theory.—The next authoritative pronouncement on the origin of caste is that of Sir Edward Gait, who in an article on Caste in the third volume of Dr. Hastings' *Encyclopaedia of Religion and Ethics*, and again in the *Census Report of India* for 1911 enumerated the factors that, according to him, combined to produce caste. Though most of these factors had been mentioned by previous writers, an interesting new point made by him is the suggestion that the present rigidity of caste restrictions arose in the functional groups through the power exercised by the

Panchayats. The factors enumerated by him are the following:—

(1) There was, first, the prejudice common to the Aryans and various aboriginal tribes, against giving a daughter in marriage outside the tribal limits. (2) There was also, after a time, amongst the Aryans, a strong feeling that it was desirable, so far as possible, to avoid intermarrying or sating with persons of lower social rank. (3) There was a still stronger feeling among this fair race against any sort of social intercourse with the despised black aborigines—a feeling which finds its counterpart at the present day in the attitude of the Boers towards the Kafirs. (4) The fact that some sections of the Aryans came to India with comparatively few women, and were perforce compelled to take wives from amongst the aborigines, necessarily relegated children of such mixed unions to a lower position than those of the pure race, and made them divided amongst themselves, like the quadroons and octroons of America, and the rivalry amongst these half-breeds accentuated the already strong sense of racial cleavage. (5) Social distinctions based on colour and pride of race were with the progress of Hinduism complicated by further distinctions based on ceremonial practices, such as the observance or non-observance of certain rules of conduct and of certain restrictions in the matter of food and drink, while some pursuits were regarded as less reputable than others. In this connection it is pointed out that considerations of ceremonial

purity might, to a more or less extent, have been derived from the aboriginee, and the instance is cited of the Pre-Dravidian Kharia who will not eat at the hands of even tribe-fellowe not belonging to his own family. (6) As a result of the development of the idea and prejudices enumerated above, society gradually became divided into a number of well-marked groups, the tendency of the members of each group being to hold aloof from all outsiders, and the belief gradually gained ground that they were descended from a common source, and with the growth of belief in a common origin the tendency would steadily become stronger for each group to regard itself as a separate entity, and marriage and social intercourse between the different groups would thus tend to become more and more unusual,—“and in India, where so much regard is paid to custom, that which is unusual...comes to be regarded as wrong and unlawful”. (7) The next, and crucial, stage in the development of the caste system had its origin among the functional groups. These guilds, gradually organized themselves for craft purposes under Panchayats, or councils of headman. Indian lack of personal independence made it easy for the Panchayat, representing the guild as a body, to enforce on its individual members the views which were generally held regarding intercourse with persons outside the guild. Intermarriage and commensality were thus in course of time prohibited absolutely, and the idea that each

group was an entirely separate entity became stronger than ever. Hence arose, amongst the functional castes, the rigidity that distinguishes the Indian caste system from other social groupings such as the trade-guilds of mediæval Europe. (8) "The example set by the functional groups was followed by other groups, not consciously, sentiments of social exclusiveness developing the general feeling that any breach of established custom constituted an offence which was the duty of the community to take cognisance of. Caste in its present form thus became a universal feature of the Hindu social system. Even now the restrictions are greater and more readily enforced amongst the functional groups than amongst the higher castes, which however have no *panchayats*."

It is pointed out that "this final development of the caste system appears to have taken place, not in the Punjab, which was first occupied by the Aryan tribes, but further east, possibly in the ancient kingdom of Magadha. Even at the present day, caste is far weaker in the Punjab than elsewhere; and it has attained its fullest development, so far as the idea of pollution is concerned amongst the Dravidians in Southern India". Sir Edward concludes:—"It has often been said that caste is an invention of the Brahmans; but this does not seem to be the case. The Brahmans have had a powerful voice in determining the relative rank of the different Castes, but they have not greatly concerned themselves with their internal affairs or with the processes of fission or fusion

by which the castes of the present day have been evolved".

7. Slater's Theory. In 1924, Dr. Gilbert Slater who was formerly a Professor of Indian Economics in the University of Madras, promulgated a new and startling theory of the origin of the Indian Caste-system. In his book on *The Dravidian Element in Indian Culture*, he has sought to prove that caste is a Dravidian institution. He equates the Dravidian with the Asurs of Vedic literature, and says that while the Northern Dravidians were Aryanised in language, the Aryans were Dravidised in culture. The Dravidians of the Rig-Vedic age, he points out, had castles, cities and wealth, and "a priest-magician caste such as apparently did not exist among the Aryans, but which is one of the most important features of Hinduism". According to him, it points directly to the conclusion that "the Bramhan caste itself and its position of dominance over the Kshatriya or warrior caste is a Dravidian institution". The racial conflict of the Aryans with the Dravidians and pre-Dravidians, according to Dr. Slater, passed through three stages: The first, indicated by the Rig Veda, was the stage of slaughter and devastation, the superior mobility of the invaders enabling them to concentrate an overwhelming force against each centre of resistance. The second stage came with the realisation that has always come to such invaders sooner or later, that it was more profitable to enslave than to kill; and then Aryan king-

doms were established, guarded by an Aryan soldiery, and sustained by the labours of Dravidian peasants and artisans. Thirdly came the stage depicted in the Epics, when Aryan kingdoms warred and made alliances indiscriminately with one another and with Dravidian states surrounding them that still maintained their independence. During the second stage, and still more during the third, a mutual action and reaction was taking place. Intercourse included intermarriage; it involved a struggle for survival between languages. ~~That the more brawny but thick-headed Aryans should learn the extraordinarily difficult language of~~ the 'ill-speaking man', as the Vedas term the Dravidian, was not to be supposed. The Dravidian instead had to learn Sanskrit. The same motives that have influenced the present-day Brahmins of the Madras Presidency to master the English language "existed from the time of the establishment of Aryan predominance in the Punjab to induce the Dravidian Brahmins of that and neighbouring districts to adopt Sanskrit as their language, and to constitute themselves the guardians and exponents of the Vedas". "They had behind them the traditions of magic and of priestcraft", which helps the acquisition of power and influence. Although the immediate effect of the incursion into India of Aryans who had no specialised priestly caste was to depose the priestly caste temporarily from its supremacy, and to make it yield precedence to the warrior caste, yet during the centuries that followed, "the Indian

environment had worked its effect, the terrific heat of the summer sun, the monsoon deluges, hurricanes, pestilences, famines, all combining to teach men to honour rather those who asserted their power to control the elements and conciliate angry deities than those who wielded the sword, and thus at length the Brahman caste succeeded in re-establishing its supremacy. And in course of centuries, the Brahman caste became largely Aryanised in blood, as the most powerful men were able to secure in marriage the fairest brides".

By degeneration the ancient Dravidian developed the idea of transmigration of souls supplemented by the doctrine of *Karma*. "The Aryan invasion", says Dr. Slater, "though not, as some have supposed, the cause of the caste system, may well have modified it by strengthening two tendencies which were inherent in it: (1) the tendency to associate caste differences with difference of shade of colour; and (2) the tendency for castes to be graded in a fairly definite scale of social precedence".

The prohibition of interdining between different castes followed naturally from the prohibition of intermarriage. With regard to the origin of caste endogamy, Dr. Slater's explanation is as follows:—

The origin of caste lies partly in occupational and partly in racial differences. The tendency of a son to follow his father's calling is only natural. The reason why in India alone the full development of this tendency should have taken place is the antiquity of Dravidian civilisation and its long and slow development. "One art after

another became developed into the exclusive occupation of certain artisane, who jealously kept their methods as exclusive possession as far as possible in their own families. The tropical climate imposes inertia and hinders that more energetic frame of mind which seeks for more than one occupation, so that in India the artisan tends to be more specialised than in temperate regions. The tropical climate also leads to early sexual maturity, and that again to marriages of boys who are still immature in other respects. Naturally in these circumstances it is his father who selects his bride for him, and naturally he selects the bride from the families of men who follow the same craft. The association of magical practices and religious ceremonies with the work of the craft helps in the building up of caste solidarity. Marriage outside the caste becomes one of the things which are not done, and therefore reprehensible. As for untouchability, Dr. Slater thinks that in some cases it is a natural result of occupation: Thus, the sanctity ascribed to the cow makes the leather-working castes untouchable. As for the origin of the Brahman caste, Dr. Slater's speculation is that Prof. Elliot-Smith's Egyptian "bringers of the heliolithic culture" came to India, mingled their blood with the Dravidians (not the pre-Dravidians as Elliot-Smith and Perry would say) and the result was the Brahman caste. In support of this startling theory, Dr. Slater further says—(1) that the Brahmins have a tradition of descent from an ancestry different from that of the

commonality ; (2) that, as Perry has shown, like the Indian Brāhman "the carriers of the heliolithic culture" claimed divinity and established in various places in Indonesia and elsewhere ruling classes claiming divinity or divine descent ; (3) that "the carriers of heliolithic culture" combined the worship of the Sun and the Serpent, and the Brāhman caste was closely associated with Sun worship, and that the Nambudiri Brāhmane in Southern India worship the Cobra in the shrine of Nayar household ; (4) that "the carriers of the heliolithic culture" brought from Egypt a knowledge of agriculture as well as the arts of spinning and weaving, and that is why the distinguishing mark of the Brāhman is the sacred cotton cord worn by him.

8. Gilchrist's Theory.—Another recent writer, Prof. R. N. Gilchrist, in his book on *Indian Nationality* (1920) has opined that the Caste system is "simply an application of animism or spiritism to society". In totemistic tribes the totem is the centre of good and evil, the consequent object of worship and the home of spirits. The spirit idea, translated into society, is responsible for different social strata each of which contains its particular spirit. "The spirit of the highest class is the all-powerful and all-beneficent spirit. It resides in the Brāhmans. This spirit must not be defiled by direct corporeal touch or by the intermediate method of objects touched by, and therefore containing, the lowest spirits; nor must it come into contact of any kind with the emanations from these lowest spirits".

9. Johnstone's Theory.—Quite another novel racial theory of the origin of caste was propounded by Mr. Charles Johnstone in the introduction to his English translation of the *Bhagabat Gita*, published in 1908. According to him the four main caste sprang from different races : the Brāhmins from a White race who probably entered India by way of the Hindu Kush ; the Kshatriyas from the red Rajput race akin to the ancient Chaldeans and Egyptians who occupied Northern India from the Indus to the Ganges ; the Vais'yas from the Yellow agricultural races, who occupied the area south of the Rajput territory ; and the S'udras from a Black or dusky race who occupied Southern India. The great *Kuru-Panchala* War recorded in the *Mahabharata* weakened the Kshatriyas and made room for the dominance of the sacerdotal Brāhmins. The earliest *Upanishads* show that the sacred wisdom was then entirely in the hands of the warrior race of Kshatriyas, and two of the *Upanishads* record the first initiation of a Brāhmin into that wisdom by a princely Kshatriya who marked the occasion by declaring that this wisdom had never before been given to a Brāhmin. The twin-doctrine of re-birth and liberation, Mr. Johnstone tells us, was imparted by the Kshatriyas to the Brāhmins who had till then only believed in the soul's immortality but not in re-birth. "They conceived of the souls of the dead as still present in earthly life with the living members of the family who offered sacrifices to them. The Yellow

Vais'yas of Central India held a somewhat similar belief as the Brahmans. To it they added a practical spiritualism, their priests being mediums, who obtained communications from the souls of the departed ancestors, in trances and visions. The Black races propitiated the menacing powers of nature in the shape of uncouth spirits or deities". "The many-armed and fantastic Indian gods", says Mr. Johnstone, "are in all likelihood the contributions of the darker races of the South to the common fund".

Such are some of the theories propounded in recent years regarding the origin and development of Caste. Other modern explanations of Caste are variations on the same key, being selections and combinations of some of the different factors indicated by different writers with especial stress being laid by each writer on one or more of those factors. Among the writers on Caste within the last three years, while Mr. E.A.H. Blunt⁴ says that "the Indian Caste-system is not an artificial product of a man or a body of men, but the result of a process of evolution, which under the influence of its environment, has continued up to the present", and that "commensal and food restrictions are the result of animistic tabus, reinforced by the Brahminical doctrine of ceremonial purity", Dr. G.S. Ghurye⁵, on the other hand, asserts that "Caste in India must be regarded as a Brahminical child of the Indo-Aryan culture, cradled in the land of

⁴ *The Caste System in Northern India* (1931), p. 32.

⁵ *Caste and Race in India* (1932), p. 148.

the Ganges: and thence transferred to other parts of India by the Brahmin prospectors'.

10. Hutton's Theory— Finally, in his *Census Report for India, 1931*, published in 1932, Dr. J. H. Hutton gives the following explanation of Caste:— "The sentiments and beliefs on which caste is based presumably go back to the totemistic Proto-australoid and to the Austroasiatic inhabitants of pre-Dravidian India and we may conceive of their becoming effective on contact with Dravidian-speaking strangers bringing new crafts from the west. Hence would arise local tabus; tabus against certain crafts and persons; tabus tending to become tribal and to erect rigid divisions between communities. Even in early Vedic literature different words appear for identical occupations. With culturally superior strangers hypergamy must almost certainly arise, and if there came a foreign priesthood with the ancient sciences of south-west Asia, the belief in their magical powers would make them the most heavily tabued of all".

Certain institutions which Dr. Hutton found among the Mongoloid Nagas of the unadministered territory to the east of the Naga Hills throw, in his opinion, "a definite light on the origin of Caste and religion as they have developed in another environment". In those Naga villages, each of which is an independent political unit, "there is very often to be seen a distribution by village of certain occupations. Thus, some villages make pots but do not weave cloth, others weave;

and others again are occupied principally with blacksmith's work, the one village bartering its products with its neighbours, when not prevented by mutual hostilities". "Here", says Dr. Hutton, "we have clearly the occupational aspect of caste origine on which so much emphasis has been laid by Nesfield and Ibbetson, and indeed the remnants of such a condition seem to have survived in Northern India until the Buddhistic age, as the *Jatakas* indicate that certain trades were localised in separate villages, some containing potters, others smiths, and so forth; but it is not the only aspect". Dr. Hutton informs us that sometimes when a part of one Naga village community is compelled by circumstances to migrate to some other village, though the immigrants are generally welcomed to settle and cultivate they are not permitted to ply their ancestral craft when that differs from the occupation of their hosts. It is suggested that the underlying feeling of this taboo is that "the practice of the tabued craft will affect the crops and the fruits of the earth generally, perhaps, because it is an offence to the ancestral spirits who are generally regarded as the source of fructification; or it may be that the particular form of *mana* or *aren* which enables the manufacture of the article made by the strangers is liable to neutralise the corresponding magic on which the traditional village industry depends". Besides this taboo on occupation, Dr. Hutton's Nagas are also said to furnish instances of taboos on commensality. Certain foods are peculiar to certain

exogamous Naga clans, and are in many cases associated with their clan ceremonial. From this Dr. Hutton suggests, as a likely hypothesis, that "the presence of strange craftsmen practising their craft is condoned or rather rendered less dangerous by the prohibition of intimate relations with them, reducing thus the inconvenient strictness of one taboo by erecting another which at the start may be less irksome". Another hypothesis suggested by Dr. Hutton is that the food or other contacts of strangers is itself regarded as dangerous, owing to a supposed infection with their dangerous *mana* or soul matter; "and this soul-matter is particularly perilous if such strangers have new and, what is the same thing, mysterious arts and therefore magical powers. ... The differentiation between cooked and uncooked food as a vehicle of pollution so familiar to any observer of Caste in India is clearly traceable to this view of the infection, by the act of cooking, of the food cooked with the *mana* of the cooker".

As for the Caste taboo on inter-marriage, Dr. Hutton opines that it "could be easily traced to a similar source if not the same one and, once accepted, would be tremendously strengthened and indefinitely perpetuated by the practice of hypergamy and by the comparative racial exclusiveness as regards marriage of the Indo-European invaders of the 2nd millennium B. C." As a supposed instance of the connection of the commensal taboo and the marriage taboo, Dr. Hutton points out that "among the Mafulu of New Guinea no girl

who is not a near relative of a bachelor may even see him eat".

On such evidence Dr. Hutton argues that "all the requisites for the growth of caste seem to have been present in India long before the Aryans swept down from the north; and the fact that caste is still far stronger in southern than in northern India, and there is weakest in the Punjab, is of the greatest significance". Dr. Hutton points to the "pride of race, which has ever and everywhere characterised the Indo-European", as having been instrumental in crystallising on the basis of a fixed social scale, the pre-existing taboos arising from magical ideas. He argues not that caste in its present form is a pre-Aryan development, but that without these essential pre-Aryan ingredients, "the development of caste would not and could not have taken place". The Hindu law-givers merely described "in terms of an intrusive Indo-Aryan society a social system really based on the tabus of pre-existing conditions". "Hence", says Dr. Hutton, "the formalist fictions of the Code of Manu, by which all castes are derived from four *Varnas* and arranged in a scheme of which the practice of hypergamy is the keystone". As for the degraded position assigned to the issue of an hypogamous or *anuloma* marriage (to whom is assigned a position even lower than that of his low-caste father), Dr. Hutton makes the ingenious suggestion that "since he could not claim kinship through his [Aryan] mother with her exogamous patrilineal class, nor through his non-Aryan father with his matrilineal family, and having no claim on family property under either, [the

makkathāyam or the *marumakkathāyam*] system, his position would tend to become degraded, which would account for the low statue given in Manu's Code promulgated at a date when the precise cause of the low position were no longer clear and called for some sort of formalist explanation." ⁶

Such is the latest explanation of caste-origins in which some of the theories and suggestions of previous writers,—the racial derivation which in various forms have been suggested by various previous writers, the pre-Dravidian origin of food and other taboos suggested by Oldenberg, Rice and Gait, the influence of hypergamy and kinship suggested by Risley, the functional origin of Caste stressed by Ibbetson and Nesfield, the influence of pride of blood and social rank suggested by most writers on Caste,—are each given its place and, with his own suggestion regarding the local origin of the occupational taboo, combined into a composite theory, which just now appears to hold the field.

⁶ Even the Purdah system (which, barring the 'gosha' of the Nambudiri ladies, is practically absent in Southern India) is attributed by Dr. Hutton to "the combination of the patrilineal family system of the Aryans with the practice of taking wives from a matrilineal society".

INDIAN ETHNOLOGY IN CURRENT PERIODICAL LITERATURE.

In *Man* for February, 1934, Mr. E. O. Sherborne notes that in the Chittagong district it is customary for local dacoits who roam the district (mostly Mahomedans said to be descendants of the Chittagong pirates), to spread a shroud, stolen from a corpse, over the roof of a house, to prevent the sleeper from waking. Some informants of Mr. Sherborne told him that any part of a corpse would do equally well and one even suggested that a dead jackal had the same effect. Mr. Sherborne considers this to be a variant of the "Hand of Glory" referred to in the 'Ingoldsby Legend'. The English practice was to cut the hand from a gibbet-corpse and after making it into a sort of torch with resin, to set it in the house to be robbed, lighting the five finger-tips to the spell:—

"Sleep all who sleep, wake all who wake,
Be as the dead for the dead man's sake".

In *Folk-Lore* for December, 1933, Mr. Maung Htin Aung, contributes a paper on *Alchemy and Alchemists in Burma* in which it is suggested that the fundamental ideal of the Burmese alchemist, to possess a perfect body which will be above the ordinary laws of nature, represents a higher stage in man's mental development than that of magic.

In the *Journal of the Anthropological Society of Bombay*, for the year 1933, appear the following articles:—"Something more about Superstition" by S. S. Mehta, "The Sinhast Fair and the Cult of Nudity" by R. P. Masani; "A few Traits of

Culture, common to the ancient Germans, Indians and Iranians", by the late Dr. J. J. Modi; "Dog's Status in Hindu Sacred Literature," by K. A. Padhye; and "On the Parallelism between Mahābhārata Legend about the Dis-robing of Draupadi and a Tradition recorded in the Japanese Kama-kurashi".

In the *Quarterly Journal of the Mythic Society*, Mr. L. A. Krishna Iyer contributes an article on "The Religion of the Primitive Tribes of Travancore", Mr. S. C. Mitra, writes on "Fire-Ordeals" and continues his "Studies in Bird-Myths" and "Studies in Plant-Myths", Mr. K. Ramavarma Raja writes on "Chakkia-Kultu of Kerala", and Mr. S. S. Sastri contributes the first instalment of his "Studies in the Indus Scripts".

In the *Indian Historical Quarterly* for December 1933, Mr. Sasanka Sarkar, writes on "The Origin of the Malpaharias of the Rajmahal Hills".



NOTICES OF BOOKS.

Pagan Survivals in Mohammedan Civilisation.—*By Edward Westermarck. (Macmillan. 1933)*
Pp. VIII+190. Price 8s. 6d. net.

Dr. Westermarck is our best authority on the Sociology of Morocco; and the present volume in which he discusses certain surviving traces of pagan beliefs and practices in the popular religion and magic of the Mohammedan population of Morocco is one of absorbing interest from cover to cover. In the first Chapter, the beliefs and practices relating to the Jinn are set forth and their origin is discussed. Though, many of them have been preserved from the old Arabic paganism, some were introduced by the religion of Mahomet, and others were added from earlier beliefs and practices prevalent in pre-Islamic Morocco and Sudan. In successive chapters the author deals with the beliefs and practices relating to the Evil Eye, the Curse and its varieties, the Conditional self-imprecation or oath and the ordinary categorical Curse together with the right of sanctuary and the rites of covenanting, the *baraka* or Holiness, its prevalence, manifestations and sensitiveness to external influence,—and Berber and Roman Survivals in Ritual. The book will be a welcome addition to the ethnologist's library.

Indian Idealism.—*By Surendra Nath Das Gupta, (Cambridge University Press 1933)*
Pp. XXII+206. Price 10s. 6d. net.

This book consists of six Lectures which deal successively with I. The Beginnings of Indian Philosophy; II. & III. Upanishadic Idealism, IV.

& V. Buddhist Idealism ; VI. The Vedānta and Kindred forms of Idealism. The author has attempted to show "how from the imperfect germe of idealism different forms of idealism sprang up through the influence of other tendencies that grew with time. Some of these forms might be called respectively evolutionary idealism, objective idealism, subjective idealism, absolute idealism and also nihilistic idealism. These, however, our learned author tells us, do not exhaust the entire course of the development of idealism in Indian philosophy ; for, certain systems which may be regarded as idealistic or realistic idealism have not even been touched. "Idealism has not only been one of the most dominant phases of Indian thought in metaphysics, epistemology and dialectics, but it has also very largely influenced the growth of Indian ideal as a whole."

The author's view that the Upanishads are a development from Vedic "pure unspeculative realism and ritualistic magic" to a form of "mystic idealism" is in conflict with the orthodox Indian view-point which accepts the Upanishads as explications of the significance of the Vedic cult expounded in the *Bṛāhmanas* and the *Aranyakas* which form the primary discourses on the Vedas. The Vedic view of *yajna* has been philosophically analysed and enunciated in the Vedas and the Upanishads in various hymns and discourses. Thus, if we examine the famous *Purusha sukta* (R. V. X. 90) we find that the idea of *yajna* in it is not a "magic ritual". It represents the whole world, personified as *Virāṭ Purusha*, and treated as a sacrifice (*yajna*) to the Creator, the gods who

were first born treating the world in this way and performing the minor sacrifices in the manner of this world-sacrifice. It is also interesting to note that the great *yajna* thus performed is, in the words of the *Purusha sukta*, nothing but "*yajna* performed for *yajna*", or, in other words, the worship of the emanations of God, and sacrificial offerings to them in the way of the offering to God Himself of His creation—the whole world. This is neither polytheism nor henotheism but true and genuine Theism and may only be grasped in all its aspects by a careful study of the Vedic hymns in the original. We cannot agree with the learned author in holding that the *Brahman* of the Vedas is not the controller of powers behind "all our sensory and motor activities and thoughts." Again, we find the same idea in the famous *Hiranya Garbha Sukta* (R. V. X. 21) which depicts God in his first emanated form as embracing all other phases and the whole world, not merely as an external controller but also as an internal controller of all human activities and the world's activities. Instances might be multiplied to show that the Vedic hymns are not magic formulas but embrace all kinds of human activities and aspirations in the spheres of morality, philosophy and religion; and the God of the Vedas is not external to human nature but its sole Guide, Controller and Goal.

Coming next to the Upanishads, we find that our author seeks to trace in them a development from the "magic ritualism" of the Vedas to another kind of magic, viz., that of mystic operations in as-

cetism, self-sought penance and sufferings. No passages from the Upanishads have been quoted to show that any of the Upanishads mark a departure from the Vedic cult of *yajnas*. In fact, we are inclined to think that the author has confounded the idea in the Upanishads with that in the Puranic fables about the boon given to bad men by the gods (much against their own interests) as rewards for their penances.

The Upanishads, as we read them, inculcate the same cult of *yajna* with which the Vedas are replete, and serve to explain its true significance. Take, for instance, the *Brihadaranyaka Upanishad*. It begins with an explanation of the *Asvamedha yajna* and shows that the whole world is nothing but a fast steed dedicated to the Creator for sacrifice even as the horse is dedicated in the *Asvamedha yajna*. It further goes on to say that the same *Asvamedha yajna* is embodied in the life of a human being who is like unto a sacrificial horse dedicated to the Creator in the sacrifice of life, and the horse runs free for the term of the life of a man and is then sacrificed to God. So too the *Chhandogya Upanishad* begins with an explanation of *yajna*. The other Upanishads also establish the same view of *yajna*. As for the author's view that there is no trace of morality or religion in the Vedas and the Upanishads, it may be pointed out that the Vedic hymns are invocations to the gods to keep their devotees free from sin and lead them in the path of virtue, and the doctrine of Karma is enunciated in the Upanishads (Vide *Yajur Veda*, I. 14—15 etc.; *Chhandogya*

Upanishad, VIII, 13, 14, 16, etc. ; Kothopanishad (answer of Yama to Nachiketas about the rebirth of an individual according to his actions in life). These and other hymns and passages will make it abundantly clear that morality, religion and philosophy were not unknown in the days of the Vedas and Upanishads nor did they develop with Buddhism, nor was the law of *Karma* first introduced by Buddhism.

S. C. BANERJI-Shastri.

The History of Buddhist Thought.—By Edward J. Thomas. (Kegan Paul. 1933) Pp. XII+314. Price 15 S. net.

This is another volume of the excellent "History of Civilization" series edited by Prof. C. K. Ogden,—and a worthy successor to the author's previous work *The Life of Buddha*. In the present volume, Dr. E. J. Thomas seeks "to trace the growth of the Buddhist community, to indicate its relation to the world of Hindu and non-Hindu societies in which it arose, and to follow the rise and development of the doctrines from their legendary origin into the system which has spread over a great part of Asia." The learned author has carried out his self-imposed task with consummate skill and ability. This admirably clear and comprehensive account of the development of Buddhist thought will form a valuable addition to our comparatively limited library of Buddhist studies.

Our Forefathers : The Gothic Nations:
A Manual of the Ethnography of the Gothic, German,

Dutch, Anglo-Saxon, Frisian and Scandinavian Peoples. By Gudmund Schutte. Volume II, (Cambridge University Press, 1933) Pp. XVI+382 and 20 plates, Price 30 S. net.

We reviewed the first volume of this valuable work in our issue of January—March, 1930. The work aims at giving a systematic ethnological description of the several Gothonic or Germanio peoples on strictly scientific lines. In the first volume a general account of the Gothonic group of peoples as a whole was given. The present volume supplies the methodical framework of an ethnographic manual for each sub-group separately, showing how the detailed information expected in such a manual should be arranged. As the author rightly says in the Preface, "it is impossible for one man to cover satisfactorily the whole of the ground required to fill out" the scheme. So the details have necessarily to be left to specialists to fill in. In this work, however the author had the advantage of the assistance of a large number of specialists in revising the work and contributing numerous literary references. Owing, however, to the lack of expert collaboration the author has only worked out four points of the sequence of paragraphs that forms his ideal framework; and even here, says our author, "the details themselves are of unequal quality, sometimes being based upon my own special researches, sometimes upon manuals of recognised value". Yet the work is one of unique importance and will form an invaluable addition to the ethnologist's library,

The Origin of Living Matter.—*By H. A. Gray and N. M. Bligh, (Heffer, Cambridge, 1933). Pp. 27. Price 1s. 6d. net.*

In this challenging little book the authors discuss the bearing of astronomical theories of the solar system on the problem of the origin of living matter, and propound the interesting theory that "the origin of living matter is closely related to the origin of the Moon, and the existence simultaneously of suitable environment on the Earth". From a consideration of the essential characteristics of living matter the authors conclude that "all phenomena of Life are due to and can be explained by the functioning of a bi-nuclear or binary atom in an environment of mono-nuclear atoms," and that "the artificial creation or analysis of living matter must be fundamental."

Indian File.—*By E. P. White (Allen & Unwin, 1933), Pp. 96. Price 3s. 6d.*

In this little book, the author, an ex-officer of the Indian Police, and a contributor to the *Punch* gives a serio-comic account of a small Indian-Feudatory State which is described under the assumed name of Arampur and of which he claims to have been the Assistant Political Agent. Amid the exuberance of droll humour and hyperbole in the book, the reader who has had an opportunity of knowing the inner workings of some of the petty Indian States may recognize some element of truth, though fortunately matters are moving much faster now than before, and it may be reasonably expected that the state of things

which the author mildly satirizes in this book is fast disappearing.

The Advancement of Science; 1933.—(*The British Association London*) Pp. 264. Price 3s. 6d. net.

This is a collection of addresses delivered at the 103rd annual meeting of the British Association for the Advancement of Learning, at Leicester, on September 6th to 13th, 1933. Students all over the world look forward every year with eager interest to the publication of these annual addresses. In the Anthropology Section, the subject of the Presidential address by the Rt. Hon. Lord Raglan was "What is Tradition?" And the General President of the Association, Sir Frederick Gouland Hopkine delivered his Presidential Address on "Some Chemical Aspects of Life."

Religious and Cosmic Beliefs of Central Polynesia.—*Volumes I & II. (Cambridge University Press. 1933). Vol. I, Pp. XXI+399; Vol. II. Pp. 398. Price 25 S. net, each.*

In these two most interesting volumes, the author has collated, sifted, co-ordinated and marshalled a vast amount of ethnographical data so far accumulated by investigators, missionaries, travellers, Government officials and others. It is unfortunate that the author did not live to give the finishing touch to the work so that the final sections of Chapter XVII have had to be published in an unfinished state. This book will long remain a standard work on the religious and cosmic beliefs of the natives of Central Polynesia. The volumes deal with Central

Polynesian myths relating to creation, the sky, the Sun and Moon, the Stars, the winds, months and seasons, the days, the conceptions of the Soul and other things, and the Soul during life and after death, the origin of death, the gods Maui and Tiki, and the discovery of Fire. Chapter XI deals with some Death-Customs. In Chapter XXVI the author sets forth evidence regarding the association of the Maui Gods with earth-quakes and volcanoes; and in Chapter XXVII, he discusses evidence in support of his hypothesis of "an archaic Maui-volcano cult of the souls of the dead associated with a supposed region situate beneath the respective islands or groups of islands or "the earth," and connected with fire and with subterranean disturbances and phenomena such as volcanoes and earthquakes, of which cult or region Maui had been god or ruling spirit, and to which region the souls of the dead were supposed to pass" A general reference map, a synopsis in a tabular form of part of the evidence concerning the souls of the dead and their destination &c., and an exhaustive index complete the volume. At more recent periods, new (theistic) cults, it is suggested, which associated the destination of the soul with an ancestral home in the west or with some region in the skies were introduced, probably by different bands of the Kava people who spread widely over Polynesia and had a predominating influence there, and the interaction of three cults created a confusion so that the early volcano-cult survives only in a modified form.

BOOKS FOR SALE.

at the "MAN IN INDIA" office,
Church Road, Ranchi, B. N. Ry.

1. ORAON RELIGION AND CUSTOMS.

By RAI BAHADUR SARAT CHANDRA ROY, M. A., B. L., M. L. C.

Price.—Twelve Rupees.

SOME OPINIONS ON THE BOOK.

Col. T. C. Hodson, M. A., *Reader in Ethnology in the University of Cambridge* :— "A book like this—sane, clear, scientific, sympathetic, comprehensive—is of prime importance to the student of Anthropology, to the student of Religion and to the Administrator who seeks or should seek to understand the forces which govern human activities, and it is full of charm and interest for the general reader who desires to know something at once accurate and intelligible of the Peoples of India".

Dr. R. R. Marett, M. A., D. Sc., *Rector of Exeter College Oxford* :— "In my opinion the latest work of Rai Bahadur Sarat Chandra Roy, namely, *Oraon Religion and Customs* (Ranchi, 1928), fully maintains the high standard of accurate observation and critical interpretation already reached by him in his well-known researches for which European scholars are exceedingly grateful; for it is obvious that, so long as he accepts the same canons of inductive enquiry, the Indian investigator has a better chance of probing and penetrating to the truth in regard to all things Indian and especially in regard to the psychological facts."

Sir Arthur Keith, M. A., M. D., L. L. D., F. R. C. S., F. R. S. :— "I am very conscious of the great work you have done and are doing. There is no school or college of Anthropology but will make a special place for this your latest work both on its library shelves and in its heart. I doubt if any one has ever done so much for the Anthropology of a people as you have done for the Oraon. I endorse all my friend Col. Hodson has written in his preface and in particular would I underlie your disinterested and persistent labour for the advance of Science".

Dr. Roland B. Dixon, A. M., Ph. D., *Professor of Anthropology in the Harvard University, Cambridge, Mass.* :—

I was delighted to get your recent book on *Oraon Religion* and have reviewed it for the *American Anthropologist*. The

hook carries on the high standard which you have set in your previous works, and presents the material in a very effective form. I congratulate you on it most cordially.

The Times (London, February 28, 1929):— A very detailed account of the religion and magic of the Oraons of Chota-Nagpur, a people of Dravidian speech. It is based on twelve years' investigation by a highly competent ethnologist, who has already published a work on this people. It can be seen what a rich field there is in India among the more primitive peoples, which, indeed, can best be tilled by trained Indian ethnologists. There is a long chapter also on movements during the last hundred years and more among the Oraons towards a higher, simpler religion, which will interest students of religious psychology.

The Nature (London, March 9, 1929):— Ethnologists are indebted to Sarat Chandra Roy for his valuable book "*The Oraons of Chota-Nagpur*" (1915), and now he has provided a study of *Oraon Religion and Customs* which should be read by all those who are interested in primitive religions. The especial value of this book is not merely in the detailed accounts of socio-religious and religious rites and ceremonies and magical practices, but in the very suggestive religious transformations that have occurred since the Oraons arrived, and the process is still continuing.

The Discovery. (London, February 1929):— When the history of ethnological study in India comes to be written, the name of the author of this work is least likely to be overlooked. By his own work and by his encouragement of others as editor of the periodical *Man in India*, he has deserved well of his colleagues in anthropology. Sarat Chandra Roy has published here the promised continuation of his studies of the Oraon of which the first instalment appeared as long ago as 1915. The author is here concerned only with their religious and magical beliefs, both directly in themselves and in their relation to the Oraon social institutions, such as are involved in birth, marriage and death. Of particular interest to students of folklore and primitive religion are the sections dealing with agricultural ceremonies and the belief in witchcraft which afford much useful material for both comparison and contrast with European folklore.

A final chapter deals with revival movements and modern tendencies in Oraon religion which is highly suggestive and deserves the careful attention of all who are in any way interested in or connected with the problems of administration among peoples of non-European culture.

The Statesman (Calcutta, March 17, 1929):— The Rai Bahadur is wellknown for his excellent monographs on the *Mundas* and the *Oraons*, and is everywhere recognized as an anthropologist of rare insight. India, with its great variety of races, nationalities, creeds, customs, and cultures affords an excellent field for the anthropologist and sociologist. This new book will be studied with delight by scientists in many countries. The author has made a capital use of his opportunities of studying the several tribes of aborigines in Chota-Nagpur and Central India.

The Forward (Calcutta, February 19, 1929):— The learned author is a pioneer in the field of anthropology and needs no introduction. His previous works— *The Birhors*, *The Mundas* and *The Oraons* are classics and had already established a world-wide reputation for him. The present volume is a befitting successor to his previous works. It is the outcome of the author's deep and laborious investigations into the religion and customs of the *Oraons*, a much-neglected tribe of Chota-Nagpur, carried on for a long period of about twelve years and as such an invaluable treasure to students of anthropology and students of religion.

The get-up of the book is excellent. In short, the book leaves nothing to be desired.

The Servant of India (Poona, May 30, 1929):— The book is worthy of the author, Rai Bahadur S. C. Roy of Ranchi who is a well-known student of anthropology relating to the aboriginal tribes of Chota-Nagpur and the Central Indian Plateau.

The chapter on socio-religious rites and ceremonies is very interesting and demands careful study. The last chapter on the *Oraon Religion* with its revival movements is exceedingly instructive.

We strongly recommend the book to students of anthropology as well as to the general reader.

The Modern Review (Calcutta, January, 1929):— Rai Bahadur Sarat Chandra Roy is one of the few Indians who has shown a keen interest in the study of the primitive folks

of this country. In fact, the works that he has already published have earned for him the reputation of being our foremost authority on the aborigines of Chota-Nagpur. The present volume on *Oraon Religion and Customs* is the sequel to his earlier work on *The Oraons of Chota-Nagpur* (1915). In it the Rai Bahadur has given an exhaustive account of the religious and social institutions of this interesting tribe, the result of close personal observation and intimate acquaintance spreading over a period of twenty years. He has analysed the Oraon beliefs into their purely religious and magical sides and has described the customs and rites associated with the chief crises of life. As an authoritative treatment therefore of Oraon life in all its phases, including some of the modern tendencies, his account could hardly be improved.

The book is well-printed and illustrated and the price is moderate for a work of this kind. For students of Anthropology in the Post-Graduate classes of our Universities it should form a very handy and reliable text-book for some of their courses.

The Quarterly Journal of the Mythic Society (Bangalore, July, 1929):— Rai Bahadur Sarat Chandra Roy is too well known in the anthropological world to need any introduction. The publication of a volume on *Oraon Religion and Customs* was foreshadowed in 1915, when his *Oraons of Chota-Nagpur* first appeared. He has since been engaged in the investigation of their religion and customs for well-nigh twelve years, and the results are embodied in the present richly illustrated volume.

The work is full of charm and interest to the general reader who desires to know something of the religion and customs of this interesting people. We have great pleasure in commending this volume to all students of anthropology.

2. THE BIRHOBIS : *a Little-known Jungle Tribe of Chota-Nagpur.*—By Rai Bahadur Sarat Chandra Roy, M. A., B. L., M. L. C. Pp. viii+608, 36 plates. (Ranchi : "MAN IN INDIA" Office 1925).
Price Rs. 10. ; or 15 s.

SOME OPINIONS.

SIR JAMES G. FRAZER, D. C. L., L. L. D., Litt. D., F. B. A., F. R. S., O. M., Professor of Anthropology in the Trinity College, Cambridge writes :—

.....I find it characterised by the same high qualities a mark your former monographs on the **Mundas** and **Oraons**. You have rendered a valuable service to anthropology by placing on record the customs and beliefs of a very primitive tribe about which very little was known before and which, but for your careful and prolonged observations, might have passed away practically unknown. As in your former volumes I admire the diligence with which you have collected a large body of interesting facts and the perfect lucidity with which you have set them forth. The book is a fine specimen of a monograph on an Indian tribe and must always remain the standard authority on the subject. I congratulate you heartily on your achievement, and earnestly trust that you will continue your valuable investigation and give us other similar accounts of other primitive and little known Indian tribes.

SIR ARTHUR KEITH, M. D., F. R. C. S., L. L. D., F. R. S., Conservator of the Museum and Hunterian Professor, Royal College of Surgeons of England, writes :—

.....You have done a splendid piece of work—one which will make Europe indebted to you.....

DR. A. C. HADDON, M. A., Sc. D., F. R. S., Reader in Ethnology, of Cambridge, writes :—

.....Your accustomed excellent work. It is a most useful contribution to Indian Ethnology.....

DR. ROLAND B. DIXON, M. A., Ph. D., Professor of Anthropology in the Harvard University writes :—

.....You are certainly doing work to be proud of in the studies you have published of the Chota-Nagpur tribes, and all anthropologists are in your debt. If only we could have similar studies of all the wilder peoples of India, how fine it would be !.....

THE NATURE, (London : September 19, 1925):—

.....Students of Indian anthropology are deeply indebted to Mr. Roy for the light he has thrown on the past and present culture of the Chota-Nagpur plateau. In the *Bihar and Orissa Research Society's Journal* he has opened up new ground in the archaeology of his area. His monographs on the *Mundas* and *Oraons* are classics. "The Birhors" is yet another first-rate study, a study not merely of an obscure tribe but also of the workings of that mysterious complex of thought and feeling which go to make up human culture..... Mr. Roy is never a theoriser or a partisan ; his diction is simple and precise, his inspiration comes straight from the hearts of the dumb folk he has made his friends.

3. THE MUNDAS AND THEIR COUNTRY. With numerous illustrations, and an Introduction by SIR EDWARD GAIT, K. C. S. I., C I E., I. C. S., PH. D.

Price—Six Rupees.

SOME OPINIONS.

SIR J. G. FRAZER, D. C. L., LL. D., Litt. D., F. D. A., F. R. S., Professor of Social Anthropology in the University of Liverpool, writes :—

It is a work of great interest and high value as a full and accurate description of an Indian Hill-tribe. I congratulate you on having produced it. You must have given much time and labour to the researches which you have embodied in this book. But the time and labour have been well spent. The description seems extremely clear and well written in the simple language which is appropriate to the theme, and the translations of the poetry are charming.

MAN IN INDIA.

Vol. XIV. } JULY—DEC., 1934. { Nos. 3 & 4.

I. ANTHROPOLOGICAL NOTES ON SOME WEST-BENGAL CASTES.

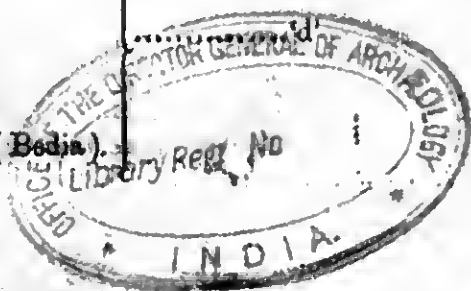
By

BHUPENDRA NATH DATTA, M.A., PH.D. (*Hamburg*).

The subject matter of this paper is the comparative Anthropological study of some castes of West Bengal. For this reason somatic measurements taken by me on some subjects of various castes have been availed of. But I am keenly conscious of the defect in not getting as yet enough number of subjects from each caste examined, so as to get undisputed data on the somatology of each of these castes. I have taken twenty-nine kinds of physical measurements on each of the subjects out of which I am using a few of the data here. In taking these measurements Lushan-Martin's system has been used.

Subjects of the following castes have been examined here : —

1. Santal.....'a'
2. Bhumij.
3. Bauri.
4. Bhuiya.
5. Korā.
6. Bagdi.
7. Khairya.
8. Lohar Manjhi. (*Bedia*).



9.	Sāmanta.	}	
10.	Teli.		
11.	Subarnabanik.		
12.	Gandhabanik.		
13.	Moirā.		
14.	Kalu.		
15.	Tantubāya.		
16.	Mahishya.		
17.	Tamli.	}'g'
18.	Nāpit.		
19.	Rajak.		
20.	Chatri.		
21.	Baidya.		
22.	Kāyastha.		
23.	Rāṇhi-Brāhṃsp.		
24.	Moslem.	}	

Here the so-called pure aboriginal Santal heads the list and is bracketed in 'a' (aboriginal). Next to him are placed all the so-called depressed castes who are bracketed in 'd' (depressed). Then comes the members of the good castes who are bracketed in 'g' (good). Finally, in order to extend the comparison with the local Moham-medans, the somatic measurements of some of them have been put as well.¹

By glancing over the table of physical data it is to be seen that as regards the colour of the eyes the range of variation is from Nos. 1 to 6 of Eugene Fischer's "Eye-table." That means, that most of the eye-colour of the subjects are within the range of black to brown. Few who have intermediate colour No. 6 are to

¹ These designations have got nothing to do with that of governmental ones. These are arbitrarily named here for the sake of convenience.

be found in the subjects of the following castes :—
A Teli and a Moslem have the eye colour No. 6.
Thus it is to be seen that the Santals and the
Depressed Classes have a more or less uniform
characteristic in their eye-colour. The higher
castes as well have uniform characteristics in the
same thing, but the variation in the shape of
intermediate or lighter colour is to be met with only
among them.

As regards colour of the hair, from the Santals
to the Brāhmins all have black colour. Only a
Kōra, a Santal, a Bāuri, a Samanta have the wavy
variety of black hair. The other castes have
black and straight hair. Here we see that this
waviness is to be found amongst some of the
depressed castes.

Next comes the question of the colour of skin.
By applying Luschen's "skin colour scale" I
have found that there is a wide range of varia-
tion in this matter.

It ranges from Nos. 8 to 35 (or 36?). The
skin-colour of the aboriginal and depressed castes
ranges from Nos. 29 to 35. That means they
are darkest in complexion amongst these groups.
The skin-colour of the upper castes vary from
No. 8 to No. 34. In this matter, there is a wide
range of variation.² Some are very light in

² The social position of the "Samanta" is a problematic one. If
he is accounted as one of the higher castes, then the skin colour
of the upper castes will group to 35 (or 36). The
Samantas, of Bankura are cultivators though they claim to be
Kshatriyas but wear no sacred thread.

complexion (No 8 in a Brahman) and some have very dark complexion (No. 34 or 35-36).

Regarding the cephalic form it is to be seen in the cephalic indices that the range of variation extends from 66.66 to 94.11. That means that from hyperdolichocephaly to ultrabrachycephaly all the varieties do exist. The aboriginal and the depressed castes have the indices ranging from 68.42 to 88.23 i.e. from hyperdolichocephaly to hyperbrachycephaly; i.e., all variations are to be found in their group. In this matter they betray their heterogeneity. It is generally supposed that the aboriginal castes of India are dolichoid, but in this list it is evident that though on the average they are dolichoid, yet there are brachycephals amongst them.

Then comes the comparison of nasal indices. The range of variation extends from Index 50 to 100. That is, the range extends from leptorrhiny to chamaerrhiny. The Santals have indices ranging from 60 to 100, while those of the Bauris range from 67 to 80. Only three subjects amongst these groups have leptorrhine characteristic. Several of the subjects noted in this paper have the index of 100. The Santals with the exception of three subjects show homogeneity in the matter of nasal index. Barring a few cases of leptorrhiny and chamaerrhiny, the lower castes show a tendency towards mesorrhiny. As regards the "good" castes, the range of variation is from 50 to 100, i.e. the subjects of these castes, taken together as a group, show

decidedly its heterogeneous characteristic in nasal form. In this group there is a decided tendency towards mesorrhiny than towards leptorrhiny.

As regards stature, the range of variation is from 150 c.m. to 175 c.m. i. e. the nomenclature of stature extends from "below the average or short" to "very tall." Amongst these the lower castes (aboriginal and depressed) have variation ranging from 150 c.m. to 170 c.m., i.e. from below the average or short to tall; whilst amongst the upper castes the range is from 154 c.m. to 175 c.m., i.e. from below the average or short to very tall. Thus we see, that in the matter of stature these groups are not homogeneous either.

By reading the table of the percentage of the frequency distribution of the cephalic indices of the total subjects in question here, it will be seen that the maximum percentage is reached by the indices group 76-80 (36%). The next highest percentage is reached by the group 71-75 (27%); and the group 86-90 (2%) shows the lowest percentage. This betrays the non-homogeneous character of the group. The table further shows that there is a group of dolichocephaly ranging from the index 67 to 75, a group of mesocephaly ranging from 76 to 79 and a group of brachycephaly ranging from 81 to 94. The highest percentage reached in this group is between indices 81-85 (14%). By counting dolichocephaly and mesocephaly together, as the two varieties of the same characteristic, we find the

majority of the subjects mentioned in this paper are of the long-beaded variety i.e. they are dolichoid.

By reading the nasal indices table of percentage, we find that the maximum percentage is reached between the indices group 76-80 (66%) while the next smaller percentage is reached between indices 56-60 (14%). This shows that there is a small leptorrhinian group and a big group of mesorrhinians, also a very small group of chamaorrhinian elements. Further, it is to be seen that the majority of the indices are centered around the group 76-80 which contains 66% of the whole subjects. Thus it is evident that as regard nasal indices, the subjects in question are also heterogeneous, and the majority are of mesorhine character.

As regards bizygomatic breadth frequency, the largest concentration falls near the area 13 c. m. which is 59.6%. But there are smaller and bigger numbers around it.

By reading the table of percentages of frequency distribution of stature indices, it is to be seen that the maximum amount of percentage is centered at the indices group 161-165 (34%) and the next highest amount is to be seen within the indices group 166-170 (24%). These cover the "average"—and the "above the average"—sized subjects. The table shows that there are some who are below 148 c. m., hence they may be called "Pygmies"; and a still bigger number between 171-175 c. m. which may be called "tall".

By making a comparative study of the percentages of frequency distribution of the cephalic indices of the four representative castes, *viz.*, the Brāhmins, the Kāyasthas, the depressed Bauris and the aboriginal Santāls, it is to be seen that the maximum amount of percentage of the dolichocephal area with the Brāhmins is to be found between the indices 71-75 which is 37.5% with them; with the Kāyasthas with the same indices-range 33%. With the Bauris the same area with two ranges falls within the indices group of 66-70 and 71-75, both being 12.5%. With the Santāls the same dolichocephal area falls within the indices numbers of 66-70 (20%) and 71-75 with 33%. The range of the mesocephal area of these groups falls in the same place in each case, *i.e.*, between the indices 76-80. With the Brāhmins it is 25%, with the Kāyasthas it is the same, with the Bauris it is 37.5%, with the Santāls it is 33%. On the other hand, the brachycephalic area with the Brāhmins is centered between the indices 81-85, which contains 37.5%; with the Kāyasthas the brachycephals are to be found in the indices group 81-85 (17%), and the hyper-brachycephals are to be found between the indices 91-95 (25%), this being the highest amount of percentage in cephalic group. With the Bauris the highest amount is to be found between the indices 81-85 (37.5%). With the Santāls the brachycephal area is to be found in the indices groups of 81-85 and 86-90, the both amounting to 7.0%.

Thus making a comparison of the cephalic

indices of these four castees (though the subjects are few in number), we have found out that as regards the dolichocephalic portion of their character, the Brāhmanes top the list in percentage, the Kāyasthas and the Santāls come next and the Bauris the last. Besides this, hyperdolichocephaly is to be found amongst the Bauris and the Santāls. As regards mesocephaly, the Brāhmanes and the Kāyasthas are identical in their percentage, while the Bauris have the highest percentage of the same in them. As regards brachycephaly (including a high percentage of hyperbrachycephaly) the Kāyasthas have the largest amount. But singly, i.e., only in simple brachycephaly, the Brāhmanes exceed others in percentage. The Bauris have an identical amount of brachycephaly with the Brāhmanes. The Santāls have the lowest percentage of the same element, though the lowest percentage of hyperbrachycephaly is to be met with in them. The Kāyasthas and the Santāls are the two groups which have hyperbrachycephaly in them. Regarding the cephalic indices, it can be said that as regards dolichoid (dolichocephal and mesocephal) characteristic, the four castees have this element in common amongst them. The brachycephalic element though present in all the castes is very poorly represented in the Santāls and is very strongly represented in the Kāyasthas.³ The Santāl group is overwhelmingly dolichoid. This

* Regarding the Brachycephaly of the Bengal Kayasthas see my article on "*Das indische kasten system in 'Anthropos'*" volume 22, 1927.

amount of brachycephaly perhaps is an intrusion of foreign element in their midst. In total it can be said that these castes are not homogeneous in their racial composition.

Regarding the nasal indices it is to be seen that the "LEPTORRHINIC" area is to be found with the Brahmins at the indices of 46-50 (25%) and at 56-60 (12.5%), with the Kayasthas at 56-60 (17%) and at 66-70 (8%) with the Bauris at 66-70 (14%) with the Santals at 56-60 (13%). The Mesorrhinic area is to be found with the Brahmins at index No. 76-80 (62.5%), with the Kayasthas at 76-80 (75%), with the Bauris it is also at No. 76-80 (86%) with the Santals also at No. 76-80 (80%). As regards the Chamoerrhinic area it is totally absent in the Brahman group as well as in the Kayasthas, the same is the case with the Bauris, but it is present with the Santals at index No. 100 (7%). With them it is present in hyperchamoerrhinic form.

By making a comparison we see that, the Brahmins are more leptorrhinic than the other groups, while the mesorrhinic element is present in all the groups in nearly the same area (76-80). In total we find the mesorrhinic to be the common important element with all of them.

By looking at the column of bi-zygomatic breadth in the list of measurements, we find, that the highest breadth is reached in the case of a Santal 14.9 c. m. (7%), while the other three castes have nearly the same breadth. Thus as

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regards the bi-zygomatic breadth these groups are not widely divergent from each other.

As regards stature, the highest size reached in a Brahman is 171.0 c. m. (12%) in a Kayastha is 175.0 c. m. (8%), in a Bauri is 165.0 c. m. (12%), in a Santal is 170.0 c. m. (7%). The smallest size is reached in a Brahman is 161.0 c. m. (12%), in a Kayastha 156.0 c. m. (8%), in a Bauri 153.1 c. m. (12%), in a Santal 150.2 c. m. (7%).

By comparing, we see that the maximum size amounting to tall has been reached in the Kayastha Group and the minimum size amounting to small has been reached by the Santal group.

If we take an average of the cephalic indices of all the subjects dealt in this paper, we find that the average is 76.95 (standard deviation 5.7) i. e. on the average these subjects from West Bengal are mesocephals. And the average of the nasal indices of these subjects are 75.02 (Standard Deviation 11.1), i. e., they are mesorrhinians. The higher number of standard deviation betrays the strong variability of nasal index. Thus in average they are *mesocephal-mesorrhinians*. And this is the finding of our analysis that is made previously. As regards the somatic characteristics of the Moslem subjects, it is to be said here that they are indistinguishable from the Hindus of the upper strata. They are dolichoccephal-leptorrhinians with narrow bi-zygomatic breadth, though of stature below the average.

Finally by making a correlation table of cephalic and nasal indices of these subjects from West-Bengal, it is seen that the combination of the following characteristics has taken place.

Dolichoid-leptorrhins—16		Brachycephal—subjects	
	—leptorrhins	...	8
" mesorrhins—45	"	}	... 10
	mesorrhins		
" chamoerrhins 4		Brachycephal	
	—chamoerrhine	...	0
Total			... 83

N. B. The nasal index of one subject is not given in the list of the data of measurements.

The correlation table shows clearly that the *dolichoid* characteristic is overwhelmingly large. Amongst it, the *dolichoid-mesorrhine* is the strongest element, then comes the *dolichoid-leptorrhine* element. After it come the *brachycephal-mesorrhins*; finally the *dolichoid-chamoorrhine* element is very poorly represented here. Again, the tendency of combination as is seen in the correlation table shows that with the increase of the breadth of the skull the nasal breadth increases as well.

Thus the analysis of some of the castes of West-Bengal is at an end. Here we do not find a homogeneous population. Even the aboriginal Santals who boast of keeping themselves pure are not homogeneous. There are common elements present in all the groups. Naturally the question arises wherefrom comes this heterogeneity in spite of the boastings of each caste that they are endogamous, and do not

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allow any miscegenation with the members of other castes.

In glancing over the list of somatic measurements of various Indian castes and tribes made by Herbert Risley,⁴ it will be seen that the majority of the Indians have long-headed mesorrhine characteristics. India is largely a dolichoid area. The majority of the Aryan-speaking as well as the Dravidian-speaking Indians bear the traces of dolichoid-mesorrhine characteristics in them. Further, in looking over the comparative biometric analysis made by me⁵ of the data of many of the Hindu castes from the Panjāb to Bengal given by Risley, it is to be seen that with the exception of the Panjāb Jāts and Sikhs, the dolichoid-mesorrhine element is in the majority in every caste. It is the prevalent biotype in India. The same element is found to be present in our West Bengal group in question here. Thus one cannot be sure wherefrom comes the dolichoid element in this part of Bengal. Here also it is to be noted that the dolichoid-leptorrhine, brachycephal-leptorrhine and brachycephal-mesorrhine elements that are to be found here, are also to be found in other parts of India as well. Then comes the question of brachycephalic element that is present in West Bengal. In my Biometrical Analysis mentioned already, I have shown that the brachycephal element is represented in Bengal in no

⁴ H. Risley, *Tribes and Castes of Bengal*.

⁵ See B. N. Datta's, *Das Indische Kasten System*, "Anthropos" Band 22-27 Vienna.

insignificant number. We find that, the 100 Brahmans and Kayasthas of Bengal as represented in Risley's somatic data have respectively 29% and 31% of brachycephaly in them. Thus then we find that the Kayasthas have the largest number of brachycephalic element in them, and this is exactly the finding of the data of the West Bengal Kayasthas mentioned in this paper. Thus the brachycephalic element that is to be found all over Bengal is also represented in this part of West Bengal. But wherefrom the Santals got this hyperbrachycephaly is the question. In looking over the data of the Santals as given by Mr. Ramaprasad Chanda,⁶ it is to be seen that his Santāla are also non-homogeneous and they contain a certain amount of brachycephaly amongst them. And in our findings we have found out the same fact. Whether the brachycephaly of the Santals has come through miscegeation with the Hindus of the Upper castes or from elsewhere is a question.

As regards the nasal characteristics, we have already found out that mesorrhiny is the dominant nasal form in India. The same is the case in West Bengal. Chanoorrhiny is dominant with some aboriginal castes. The same is the case with the Santals in question here, though it is not absent in some castes higher to them.

Finally it is to be said that the depressed castes stand nearer to the Santals than to the

⁶ See Chanda's '*Indo-Aryans*'.

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good castes in respect of their skin, hair, and eye colour characteristics. Wavy hair is to be found only with them and lighter shade of eye-colour is conspicuous by their absence amongst them. Further both of these groups are dolichoids and mesorrhinians. As regards the good castes they are not homogeneous among themselves but comparative lightness of skin-colour, eye-colour, high stature, leptorrhiny are to be met with amongst them, though there are somatic characteristics which are common to all the groups. Thus here we find a population of heterogeneous origin.

Table I.

Percentage of the Frequency distribution of Cephalic-Indices of 84 persons.

Cep-Index Range.	Frequency.	P. O.	Cep-Index Range.	Frequency	P. O.
66-70	14	17.0	81-85	12	14.0
71-75	23	27.0	86-90	2	2.0
76-80	30	36.0	91-95	3	4.0

Table II.

Percentage of the Frequency distribution of Nasal indices of 83 Persons.

N. I.	F.	P. O.	N. I.	F.	P. O.
46-50	5	6.0	76-80	55	66.2
51-55	0	0	81-85	0	0
56-60	0	0	86-90	0	0
61-65	0	0	91-95	0	0
66-70	6	7.22	96-100	4	4.81
71-75	1	1.2			

Table III.

Percentage of the Frequency distribution of stature of 82 Persons.

Stature (C.M.)	F.	P. C.	Stature (C.M.)	F.	P. C.
146-150	1	1.2	161-165	28	34.1
151-155	8	9.7	166-170	20	24.3
156-160	17	20.7	171-175	8	9.7

Table IV.

Percentage of the Frequency distribution of Bizygomatic breadth of 82 persons.

Bizy. breadth (C. M.)	F.	P. C.	Bizy. breadth (C. M.)	F.	P. C.
11	2	2.43	14	20	24.3
12	9	10.97	15	2	2.43
13	49	59.6			

Table V.—Comparative Cep-Indices Percentage.

A—8 Bauris.

B—12 Kayasthas.

C. I.	F.	P. C.
66-70	1	12.5
71-75	1	12.5
76-80	3	37.5
81-85	3	37.5

C. I.	F.	P. C.
71-75	4	33.0
76-80	3	25.0
81-85	2	17.0
86-90	0	0
91-95	3	25.0

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C—8 Brahmans.

D—15 Sāntals.

O. I.	F.	P. C.	O. I.	F.	P. O.
71-75	3	37.5	86-90	3	20.0
76-80	2	25.0	71-75	5	33.0
81-85	3	37.5	76-80	5	33.0
			81-85	1	7.0
			86-90	1	7.0

Table VI—Comparative Nasal indices Percentage.

A—7 Bāuris.

B—12 Kayasthas.

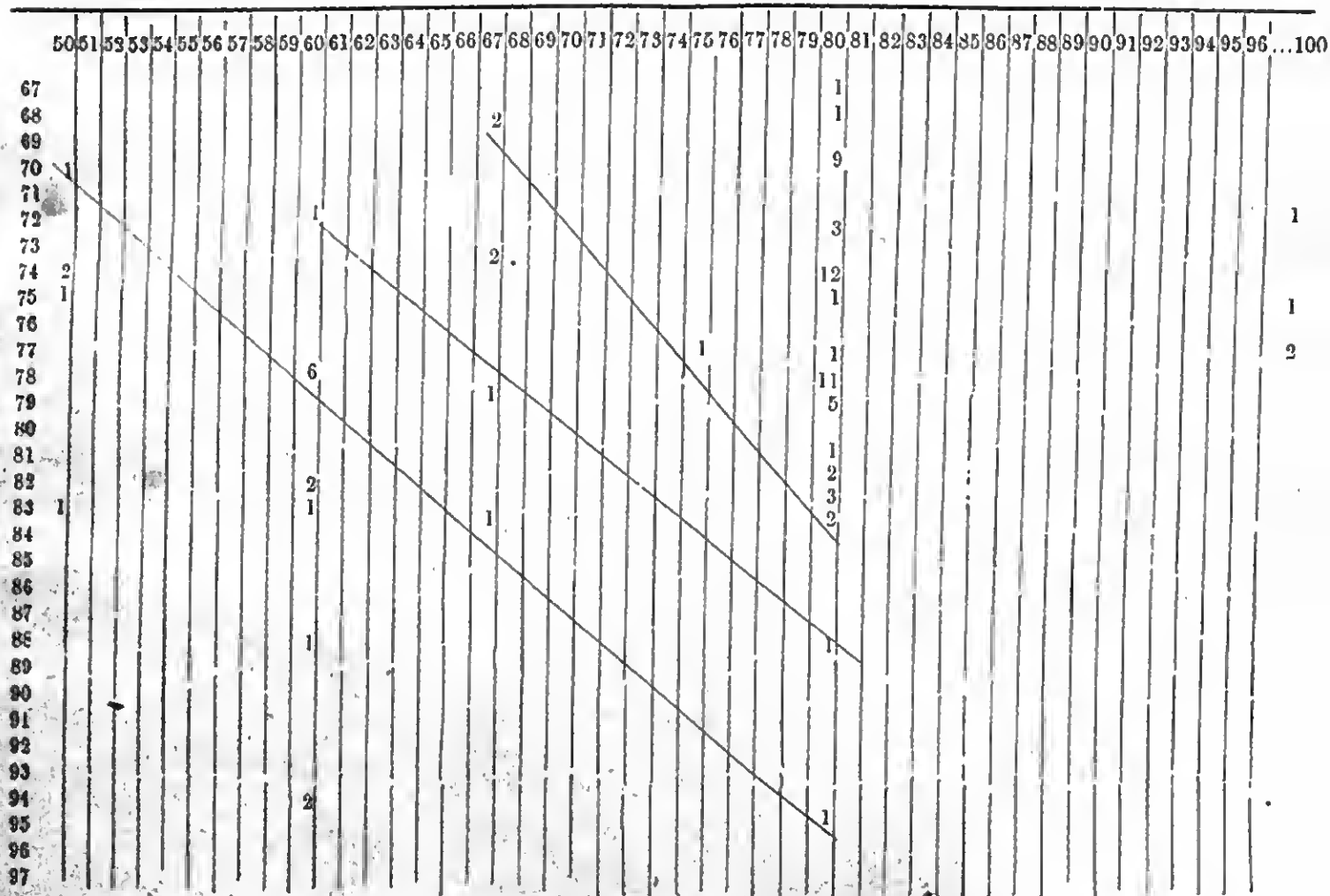
N. I.	F.	P. O.	N. I.	F.	P. O.
66-70	1	14.0	66-60	2	17.0
71-75	0	0	61-65	0	0
76-80	6	86	66-70	1	8.0
			71-75	0	0
			76-80	9	75.0

C—8 Brahmans.

N. I.	F.	P. O.	N. I.	F.	P. O.
46-50	2	25.0	71-75	0	0
51-55	0	0	76-80	5	62.5
56-60	1	12.5			
61-65	0	0			
66-70	0	0			

D—15 Sāntals.

N. I.	F.	P. O.	N. I.	F.	P. O.
66-60	2	13.0	81- 85	0	0
61-65	0	0	86- 90	0	0
66-70	0	0	91- 95	0	0
71-75	0	0	96-100	1	7.0
76-80	12	8.0			





Data of Physical Measurements of some West Bengal Castes by B. N. Datta.
(All measurements are taken in centimeter scale).

Serial No.	Caste.	Name.	Eye Colour.	Hair colour.	Colour of Skin.	Maximum length of Head.	Maximum breadth of Head.	Cephalic Index.	Height of Nose.	Breadth of Nose.	Nasal Index.	Bi-zygomatic breadth.	Stature.	District.
1	Santal.	Bhakka	2	Black (wavy)	Between 35 and 36	19.7	14.5	70.0	4.6	4.0	80.0	13.1	154.4	Bankura
2	"	Saina	2	Black	35	18.0	14.1	77.77	5.3	3.1	60.0	13.0	160.3	"
3	"	Sontal	3	"	53	19.0	13.7	73.68	5.0	3.8	80.0	14.2	155.8	"
4	"	Putel	2	"	34	19.2	14.0	73.68	5.3	4.0	80.0	13.9	165.4	"
5	"	Mongol	1 bluish tinge	"	34	19.5	14.6	78.94	4.8	4.0	80.0	13.4	166.4	"
6	"	Mahes	1 bluish tinge	"	34	19.1	16.1	84.21	4.6	4.2	80.0	13.5	161.7	"
7	"	Fagur Maji	approaching 1 bluish tinge	"	34	18.5	14.1	77.0	4.9	4.2	80.0	13.1	155.7	"
8	"	Babulal	1	"	34	17.0	14.6	88.23	5.2	3.2	60.0	13.1	155.1	"
9	"	Thoka Maji	1 bluish tinge	"	35	19.7	14.2	70.0	5.0	4.1	80.0	14.9	169.6	"
10	"	Teen Maji	Between 2 and 4	"	34	19.0	14.4	73.68	5.1	4.2	80.0	12.9	155.5	"
11	"	Choonaram Maji	1 bluish tinge	"	35	17.9	13.7	77.77	4.9	4.6	100.0	13.1	153.1	"

Serial No.	Caste.	Name.	Colour of eyes.	Colour of hair.	Colour of skin.	Maximum length of Head.	Maximum breadth of Head.	Cephalic Index.	Height of Nose.	Breadth of Nose.	Nasal Index.	Rizygoma to breadth	Stature.	District.
12	Sautal	Kanu maji	2	Black	35	19.3	14.1	73.68	5.2	3.8	80.0	13.7	168.6	Bankura
13	"	Pitam maji	1	"	Between 34 & 35	19.6	14.0	70.0	5.0	3.9	80.0	13.2	150.2	"
14	"	Thakurdas	2 bluish tinge.	"	34	18.5	13.9	77.77	5.1	4.1	80.0	11.3	162.5	"
15	"	Hoppa Santal	3	Black wavy	Between 35 & 36	19.0	14.5	73.68	5.4	4.1	80.0	13.1	160.6	"
16	Bagdi (Tentulo)	Ganes	2	Black	29	18.9	14.7	78.94	5.5	4.3	80.0	13.2	164.7	Man- bhum
17	Bhuiya	Matba	3	"	29	17.9	13.1	72.22	4.5	3.6	100.0	12.9	157.9	Bankura
18	Kora	Nemai	2	Black wavy	35	18.7	15.0	78.94	4.8	4.0	80.0	14.6	154.5	"
19	"	Keshab*	1	"	35	19.6	13.6	70.0	4.8	4.1	80.0	14.3	162.7	"

* He calls himself a "Mudi" by caste. His family originally came from Chota Nagpur. Is in the caste name "Mudi" an attempt is being made to hinduise, the tribal name of "Munda" of Chota Nagpur?

Serial No.	Caste.	Name.	Colour of Eyes.	Colour of Hair.	Colour of Skin.	Maximum length of Head.	Maximum breadth of Head.	Cephalic Index.	Height of Nose.	Breadth of Nose.	Nasal Index.	Bi-zygomatic breadth.	Stature.	District.
20	Bhumij	Brojo Sara	2	Black	35	18.5	12.9	72.22	4.8	3.9	80.0	13.1	166.2	Bankura
21	Bauri	Dinu	ff Bluish tinge in Iris.	"	34	18.6	14.7	78.94				14.1	155.2	Birhum
22	"	Bhusan	2	Black wavy	33	17.4	13.7	82.35	5.0	3.6	80.0	13.1	161.1	Bankora
23	"	Jogindra	3	Black	Between 35 and 36	17.1	14.0	82.35	4.9	3.8	80.0	12.7	163.2	"
24	"	Bonomali	2	"	23	18.7	12.7	88.42	5.3	3.8	80.0	13.1	163.2	"
25	"	Ganeh	2 (between 1 and 2)	"	Between 25 and 26	18.5	14.2	77.77	4.9	3.9	80.0	13.1	153.1	"
26	"	Gori	Between 1 and 2	"	28	16.2	13.1	81.25	4.9	3.9	80.0	12.5	161.5	"
27	"	Umesh	4	"	35	19.2	14.2	73.68	5.7	4.2	66.66	14.0	162.4	Birhum
28	"	Brojo	2	Black (wavy)	33	18.0	14.1	77.77	4.7	3.8	80.0	13.8	157.7	"
29	Khairaoor	Satis Ch Roy	2	Black	Between 34 and 35	17.7	14.2	77.77	4.5	3.8	100.0	13.0	164.8	Bankura
30	Bedia	Kume Bera	1	"	"	18.9	13.7	73.68	5.5	3.6	80.0	13.1	166.3	"

ff. The exact eye-colour of the Iris can't be got in Fischer's "Eye-colour table." There is no brown colour in Iris.

Serial No.	Caste.	Name.	Colour of Eyes.	Colour of Hair.	Colour of Skio.	Maximum length of Head.	Maximum breadth of Head.	Cephalic Index.	Height of Nose.	Breadth of Nose.	Nasal Index.	Bizygomatic breadth.	Stature.	District.
31	Redia	Bhikkari Bedia	1	Black	Between 34 & 35	17.7	13.7	77.77	5.0	3.6	80.0	12.1	155.9	Bankura
32	Samanta	Ratan Roy Samanta	Between 1 and 2	"	33	17.0	14.0	82.35	5.3	3.4	60.0	12.8	158.9	"
33	"	Saday Roy	2	Black (wavy)	Between 25 & 36	17.7	14.8	83.33	4.6	3.4	60.0	13.3	155.0	"
34	Toti	Lalbehari Sett	3	Black	18	19.4	13.8	73.68	5.0	3.8	80.0	12.8	163.4	"
35	"	Nakul Ch Pal	6	"	26	18.1	14.5	77.77	4.7	3.5	60.0	13.1	163.4	"
36	Subarnabanik	Jasaderanjan Dey	4	"	22	19.2	15.5	78.94	5.9	3.8	66.66	14.5	173.6	"
37	"	Prabhat Ch. Dey	4	"	22	20.0	14.3	70.0	5.1	4.4	80.6	13.7	172.7	"
38	"	Beharilal Dey	4	"	21	19.1	14.5	73.68	5.8	3.4	50.0	13.5	167.4	"
39	"	Ajodhyanath Dey	5	"	25	19.9	14.1	70.0	6.0	3.0	50.0	14.0	171.7	"
40	"	Gatirun Dey	3	"	22	20.5	14.5	70.0	5.3	4.2	80.0		165.7	"
41	Gandabanik	Gobindaprasad Mullik	3	Black & stiff	25	17.6	14.0	77.77	5.3	3.5	60.0	12.2	156.9	"

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Serial No.	Caste.	Name.	Colour of Eyes.	Colour of Hair.	Colour of Skin.	Maximum length of Head.	Maximum breadth of Head.	Cephalic Index.	Height of Nose.	Breadth of Nose.	Nasal Index.	Bigonial breadth.	Stature.	District.
42	Gandhanik	Rasiklal Halder	1	Black	Between 25 & 26	17.5	14.3	82.35	4.9	3.5	60.0	13.0	164.0	Bankura.
43	"	Jatindranath Mullik	1	"	25	18.2	15.0	83.33	6.0	4.1	66.66	13.5	166.7	"
44	"	Atulch Chand	2	"	23	16.9	14.7	88.23	5.2	3.6	80.0	13.7	156.8	"
45	"	Radica Prasad Chand	3	"	23	18.8	14.7	78.19	4.8	3.6	75.0	12.7	162.6	"
46	Moirā	Abinash Ch Modak	2	Black	27	18.2	14.2	77.77	4.9	3.6	80.0	13.0	155.8	"
47	"	Suryanath Modak	Between 1 and 2	"	25	18.4	13.2	72.22	5.1	3.0	60.0	11.8	158.9	"
48	"	Jayram Nandi	2	"	15	20.1	15.4	72.22	4.9	3.9	80.0	14.0	167.5	"
49	Kala	Rajani Kanta Gorai	Between 5 and 6	"	14	19.0	13.5	68.42	5.6	3.8	66.66	12.8	165.2	"
50	Rahri Brahmin	Ashutosh Ganguli	5	"	8	19.2	15.8	84.21	5.2	3.6	80.0	13.9	170.0	"
51	"	Ashutosh Ganguli	3	"	17	18.5	13.8	77.77	5.5	3.4	60.0	12.8	168.0	"
52	"	Surendra Mohan Mukherji	1	"	Between 32 & 33	18.6	13.7	73.68	5.2	3.7	80.0	11.9	161.0	"

Serial No.	Caste.	Name.	Colour of Eyes.	Colour of Hair.	Colour of Skin.	Maximum length of Head.	Maximum breadth of head.	Cephalic Index.	Height of Nose.	Breadth of Nose.	Nasal Index	Bizygomatic breadth	Stature.	District.
53	Rabri Brahmin	Surendra Nath Ganguly	2	Black	27	18.7	14.3	73.68	5.5	4.0	80.0	13.0	162.2	Bankura
54	"	Ramdas Chakravarty	1 with bluish tinge	"	18	19.6	14.7	75.0	5.6	3.5	50.0	13.2	170.0	"
55	"	Sarat Ch. Chatterji	1	"	30	18.0	15.2	83.33	5.7	3.5	50.0	13.7	170.8	"
56	"	Biraja Mukherji	4	"	20	17.7	14.5	77.77	5.5	3.6	80.0	12.9	170.5	"
57	"	Jugalk Chatterji	3	"	Between 16 and 17	18.2	14.9	83.33	4.7	3.8	80.0	12.7	165.8	"
58	Kayastha (Dakhin R.)	Rohinikanta Singha	1	"	25	18.7	14.2	73.68	5.0	3.9	80.0	12.9	155.6	"
59	"	Sailendra Nath Ghose	2	"	16	18.6	15.4	78.94	5.2	3.8	60.0	13.5	168.1	"
60	"	Sudhir K. Ghose	1	"	15	17.5	15.6	94.11	5.4	3.5	60.0	14.2	169.2	"
61	"	Charu Ch. Sen	2	"	33	18.8	14.0	94.11	4.9	3.6	80.0	12.6	164.8	"
62	"	Bepin Sarkar	2	"	34	18.8	14.5	94.11	5.3	3.5	60.0	12.6	161.1	"
63	"	Profulla Mulik	2	"	25	8.3	14.3	77.77	4.8	3.9	60.0	13.0	164.5	"

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Serial No.	Caste.	Name.	Colour of Eyes.	Colour of Hair.	Colour of Skin	Maximum length of head.	Maximum breadth of head.	Cephalic Index.	Height of Nose.	Breadth of Nose.	Nasal Index.	Bizygomatic breadth.	Stature.	District.
64	Kayastha (Dakhin rabri)	Tincory Datta	3	Black	24	17.8	14.9	83.33	5.0	3.7	80.0	13.4	175.4	Bankura
65	"	Birendra Nath Ghose	2	"	23	18.8	14.2	73.68	5.6	3.7	66.66	12.3	168.3	"
66	"	Kalikumr Ghose	*	"	21	18.8	14.2	73.68	5.5	3.9	80.0	12.9	164.7	"
67	"	Nripendra Nath Ghose	2	"	22	17.9	13.7	77.77	5.5	3.8	80.0	12.5	161.7	Burdwan
68	"	Ramendra Ghose	3	"	17	17.8	15.4	82.33	5.2	3.8	80.0	13.8	172.1	Malda
69	"	Makhan Lal Roy	1	"	Between 25 and 26	20.1	14.6	76.0	4.8	4.2	80.0	13.8	172.1	Hoogly
70	Kaln	Rampada Goral	2	"	Between 32 and 33	18.4	13.4	72.22	5.4	3.7	80.0	12.9	169.9	Bankura

* He has got cataract in eyes, hence colour of the eyes could not be compared.

Serial No.	Caste.	Name.	Colour of Eyes.	Colour of Hair.	Colour of Skin.	Maximum length of Head.	Maximum breadth of head.	Cephalic Index.	Height of Nose.	Breadth of Nose.	Index.	Biogranthic breadth.	Stature.	District.
71	Tantabaya	Sri Charan	2	Black	33	18.5	13.7	77.77	5.2	4.0	80.0	13.2	162.2	Bankura
72	"	Kalicharan Das	3	"	33	17.5	13.1	76.47	4.6	4.6	100.0	12.3	160.0	"
73	Chatri	Taachow Dhabalbabu	2	"	27	19.1	13.4	68.42	5.7	3.7	66.06	13.0	162.1	"
74	"	Mangobind Dhabalbabu	1 with bluish tinge	"	27	18.4	14.2	77.77	5.1	3.2	60.0	14.4	163.0	"
75	"	Briodaban Singh	2 with bluish tinge	white-haired	38	20.3	14.4	70.0	5.1	4.0	80.0	14.4	163.3	"
76	Mahishya	Hemch Das				20.9	14.1	68.66	4.8	4.0	80.0			Midnapur
77	"	Bisheshwar Maiti				18.9	15.1	78.94	5.4	3.7	80.0			"
78	Tamli	Probooth Ch. Datte	2	Black	17	19.8	14.2	70.0	4.9	4.0	80.0	12.0	162.5	"

Serial No.	Caste.	Name.	Colour of Eyes.	Colour of Hair.	Colour of Skin	Maximum length of head.	Maximum breadth of head.	Cephalic Index.	Height of Nose.	Breadth of Nose.	Nasal Index.	Biszygonathic breadth.	Stature.	District.
79	Napit	Prakrishna Pramanik	1	Black	27	18.7	13.7	73.68	5.7	3.5	50.0	13.0	153.6	Bankura
80	"	Bamapada Bana	3	"	22	18.5	14.5	77.77	4.8	4.0	80.0	13.0	160.0	"
81	Rajak	Joyti Ch. Rajak	2	"	31	18.5	13.7	77.77	4.8	3.7	80.0	12.3	158.3	"
82	Vaidya	Jatindranath Sengupta	1 with bluish tinge in Iris	"	29	19.1	14.1	73.68	5.0	3.7	80.0	12.8	172.6	"
83	Moslem	Syed Mahmud Ali	5	"	13	17.8	14.1	77.77	5.1	3.4	60.0	12.9	166.7	"
84	"	Syed Mafuddin	1	"	Between 27 and 28	19.8	13.9	70.0	5.4	3.4	80.0	12.9	156.6	"

N.B.—All the subjects whose measurements are given in this paper are above 22 years of age and are of the male sex.

Table of Standard Deviation, Average, Probable of Errors, Coefficient of variation &c.

	Maximum Head length	Maximum Head breadth	Cephalic Index.	Nasal Height.	Nasal breadth.	Nasal Index.	Bizygomatic Breadth	Stature
Number of subjects	84	84	84	83	83	83	82	82
Mean	186.29	142.45	76.95	51.35	37.8	75.02	131.83	1629.91
Standard Deviation	8.83	6.45	5.7	3.5	3.1	11.1	6.7	18.04
Probable Error of Mean	± 6.947	± 4.749	± 4.18	± 2.496	$\pm .29$	$\pm .82$	± 4.982	± 1.34
Probable Error of Standard Deviation	± 4.586	$\pm .33$	$\pm .297$	$\pm .182$	$\pm .24$	$\pm .55$	$\pm .35$	$\pm .9443$
Coefficient of Variation	4.72	4.52	7.4	6.81	8.2	14.79	5.08	1.1

II. THE MALERS OF THE RAJMAHAL HILLS.

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(Continued from *Man in India*, Volume XIII

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Social Organization and kinship system.

Clan system and territorial divisions of the tribe.

The Malers of the Rajmahal Hills have no clan system. No totem organization is also met with. The whole tribe is said to be divided into five territorial divisions as follows¹ :—

(1) Mandro on the North. (2) Pubbi on the East. (3) Chettah on the East of Tinpahar. (4) Part occupying the hill tracts. (5) Dakrui occupying the South and Pakur Subdivision.

Apart from these five territorial divisions I have been informed of another classification into 7 territorial divisions, by an old man in the village of Kunjbonā (Pakur). These seven territorial divisions are :—(1) Desmalia. (2) Mal-Paharia (3) Kumarbhog. (4) Samria (Male). (5) Pubbi. (6) Chettah. (7) Dakrui.

A literate Paharia (a Munsbi) in the village of Karambi (Shahebgunge), again, gave me the following seven territorial divisions of the tribe :— (1). Soria Paharia (Male); (2) Kumarbhag South of Hiranpur; (3) Darkni- in the jurisdiction of Simlong Bungalow.

¹ Bainbridge R. B., *Memoirs, Asiatic Society of Bengal*. Vol : IV

(4) Pubbi-Bathbhanga; Berdarkola; (5) Parte in Godda Subdivision; (6) Ganga-moha on the North of the Ganges; Manihari; (7) Dhāngre-Pahāriās, and living on the plains below the hills; Pachgarh. (8) Ur-Dhāngar, across the Ganges; (9) Mal-Pahāriā, south of Chandana Bungalow; (10) Deshi-Pahāriā, towards the West; Kial etc.; (11) Chettah, towards the East; Taljhari etc.; (12) Barhe-Pahāriā, towards Nnnihat (44 miles from Godda).

In seeking to interpret the above names we find that in the last of these accounts four of the five divisions of Bainbridge are named, while in the second account only three are named. There is a close coincidence between the second and the third—all the divisions of the third coinciding with the second, save and except the Desmāliā; the Deshi-Pahāriā in the third seems to have some similarity with the Desmāliā. Except as to the location of the Deshi-Pahāriā towards the West, the Munshi of Karambi appears to have been corroborated by the Pahāriās of Kunjhona, and we can rely upon him because the division Dakrni, broadly related by Bainbridge as belonging to the "south, and the Pakur subdivision" and interpreted by the Munshi of Karambi as meaning "to the south of the Simlong Bungalow", comes to the same thing.

Kunjbona is a little bit more to the north than Simlong and the mere situation of these Pahāriās tempts one to distinguish these people from the true Pahāriās living on the high hill slopes between Simlong on the West, the Dohari hill on the east and the Rajmahal subdivision on the North. The line conn-

ecting Litipara, Snrajbera, Dunika, seems to have some significance, as the Paharias in all these places live on the plains—although they fully claim to be classed with the Malers of the North residing on the hills.

These people do not restrict themselves to a strict form of exogamy, or of a form of endogamy within any particular division. The five territorial divisions of Mr. Bainbridge overlap in almost all places. Even within these five divisions no hard and fast rule hindring them to any form of exogamy or endogamy is met with.

Dalton writing in 1872 wrote as follows:—

“The Oraons have a tradition that when driven from Rohtas they divided into two parties. One under the chief went forth towards the Ganges and eventually occupied the Rajmahal Hills, the other under the chief's younger brother went South East. The tradition of a separation is borne out by the evident affinity in language and similarity in the customs of the Oraons and the Rajmahalis and though the latter do not acknowledge the relationship, their common origin may be considered as established; and as the Rajmahalis are Malas or Malavas, it may be assumed that the Oraons are Malavas too.”²

Risley, for the first time, brought out the existence of an important difference in social organisation between the two tribes when he wrote:—“The Malers have been less exposed to Hindu influences than

² Dalton, E. T., *Descriptive Ethnology of Bengal*, Calcutta, 1872, p. 245-246.

their kinsmen, the Oraons, yet the latter retain a long list of exogamous groups, and in this respect are more modern than most Hindu castes. The question seems to me to call for further inquiry. One would wish to know whether the Male ever observed the characteristic Dravidian system of exogamy, and if so, how it came to fall into disuse."³

Rai Bahadur Sarat Chandra Roy also confirms the former tradition. He is of opinion—"When in the whirligig of time some other tribe probably the Kolarian tribe of the Cheros became predominant in the Karusade's' the ancestors of the Malere and the Oraons appear to have taken shelter on the Rohtas plateau which they claim to have fortified. But even this fortress plateau they were at length constrained to leave."⁴

From the genealogical records it appears that most of the people cannot give even the name of their grand-father's father. In no case have I met with any person who could give me the name of their great-grand-father. Even it was very difficult to know the names of their grand-fathers' brother's children. This has been due to the strict isolation of the simple biological family. It is often seen that a man and his brothers very rarely live on the same hill. The eldest son mostly inherits the father's house after his death. The estimation of age by these persons is also

³ Risley H. H., *The Tribes and Castes of Bengal*. Calcutta, 1890, Vol : II, p. 56.

⁴ Roy S. C.,—*The Oraons of Chota Nagpur, Ranchi*, 1915, p. 29.

a very difficult problem. One can very rarely speak in number; they usually denote age by the approximate height of the individual concerned. Thus the age of the dead is always taken in a very wide approximation.

Among the Malers there can be marriage within kindred groups. They can trace these blood groups only up to the third generation. This is further corroborated to some extent by our previous note about these people being unable to speak the name of their great-grand-father. Mr. Bainbridge has been the only authority who has definitely referred to this peculiarity. Mr. Bainbridge writes, "The inviolable ramifications of the totemic system are absent; exogamy and endogamy are not at all the arbiters of nuptial alliances; marriage is regulated solely by the prohibition of blood relationship and, the termination of the interdict and the appearance of the fourth cousin are simultaneous."⁵

As regards the clan system having any connection with mourning groups when a person dies in a family, and also as for the prohibited foodstuffs applied to the group of relations thereby, it was found that this is extremely limited. If a man leaves four sons who reside in four different villages and he dies in the house of the eldest, the eldest son and the inmates of that house only will be subject to taboos on certain foodstuffs. The prohibited foodstuffs are flesh and turmeric for a period of five days only. Even

⁵ Bainbridge, R. B. *Memoirs Asiatic Society of Bengal*, Vol : IV, page 44.

persons who are related to the family in any way, if they happen to be present at the time of death of the man, will also be subjected to this taboo. Only five days are treated as the period of impurity after any person's death. This is applicable in the case of both the sexes. A woman also observes the same five days of taboo in the case of death of both her father and father-in-law. Further, some of these Pahāriās coming in contact with the Santals can speak the Santali language also. I have very often cited the names of the Santal clans to these people but they declare to be absolutely unaware of the clans as such among themselves. There is a prevailing belief among some of these Pahāriās that "Sāmriā" is their clan. Particularly the Mnnsi of Karambi explained to me that the Pahāriās are divided into Sāmriā, Mal-Pahāriā, Kumārbhog sections, and these he claims to be the divisions as the Santal clans as well. This view is also supported by the following statement of Dr. Buchanan:—"These people call themselves Maler; but they admit that this name is also applicable to the southern tribe of the mountaineers whose manners and language are very different and with whom they cannot eat nor intermarry, nor could I hear of any tradition concerning the two tribes having ever had similar customs, but probably their customs at no very remote times were the same, their traditions going back to no distant periods." This view is also held by a

large number of these Pāhāriās of the Pakur subdivision.

Kinship System.

Their Kinship system also does not reveal any trace of the clan system. It is distinctly held by Tylor and Rivers that "the empirical facts remain that tribes organized into exogamous sibs have a Dakota type of nomenclature"⁷; according to which kinship system should have "a single word for father and father's brother and another for mother and mother's sister; but the mother's brother instead of being classed with the father and the father's sister instead of being classed with the mother are both designated by specific terms."⁸

Conversely, we get among the Maler kinship terminologies a distinct term for each of the above relations. The terminologies show rather a slight admixture of different tongues. The father is called as "Abba"; father's brothers have distinct terms:—'pipo' for the elder brother and "Dada" for the younger. Similarly "Aiah" is used to designate mother, whereas "peni" and 'Kali' are used for elder and younger sisters respectively. "Mammu", "Mamma" are the variations of the term used for mother's brother and "Chācho" and

⁷ Lowie, R. H.—*Primitive Society*, New York, 1925, p. 144.

⁸ Lowie, R. H.—*Primitive Society*, New York, 1925, p. 60.

"Kali" are the terms used for the elder and younger sisters of the father respectively. The step-father and the father's younger brother are classed under the same term—thus showing the presence of the levirate.

The classificatory system of relationship is also present among these people. The same term is used for the step-mother, father's younger sister, mother's younger sister and father's younger brother's wife (*Kali*). Apart from this, the same term is used for father's elder brother, mother's elder sister's husband and father's elder sister's husband (*Pipo*). Corresponding to the term "*Pipo*" the term "*peui*" is used to designate the feminine gender,—the father's elder brother's wife and the mother's elder sister. It is worthwhile to mention here that the mother's brother or his wife has altogether different terms of address. A study of the kinship terms reveals some features of dual organization.⁹ It is observed in the use of the same terms for father's elder brother and mother's elder sister's husband (*Pipo*) and their wives (*Pepi*) and father's younger brother and mother's younger sister's husband (*Dada*) and their wives (*Kale*).

Another term—"Ar"—is used to designate a variety of relations, both male and female. The scope of this term and its particular

⁹ *Current Science* : Vol. I- No. 11, page 318. *The Malers and the Malpahariyas of the Rajmahal Hills*, by the author.

application to a particular relative is unknown. The term is used to designate younger brother's wife, sister's husband, wife's brother's wife, wife's younger sister's husband, son's wife, wife's elder sister and her husband, husband's elder brother and his wife and, lastly, husband's younger brother also. The wide range of application of this term can be very well seen from the subjoined relationship tables. (See pp. 37-39)

Terms of Address.

A man cannot call his wife by her name but he is to call her by the name of his sons as "so-and-so's mother". The woman in turn addresses her husband as "so-and-so's father".

Along with the relationship terms—a prefix *O'rz* or *E'rz* is used. In the case of a wife not blessed with a child—the above term only is used by the husband and *vice versa*. In the Dohār Hill (Pakur) the husband calls the wife as the girl of such-and-such village. As a matter of fact, the chief of this hill has married a girl of a hill known as Parāhhita and the wife is addressed as 'Parāhhitāni'. The term *O'rz* is also used by the wife to call the husband and *vice versa*, as we find in the relationship term list of the villages of Chotā Pachkurki (Shahebgunge) and Makka Pahār (Barharwa). This term is not actually a relationship term. In the Dohāri Hill, the wife can also call the husband in case of the absence of a child, by addressing him, as the brother of so-and-so, when usually the name of a younger sister is employed.

Relationship Tables.

	RAJMAHAL.		PAKUR.			
Relation- ship terms.	Obota Pachnrki	Borogotu	Bendar- kola	Danowar	Dohari hill	Makka Pahar.
1. Father	Abba	Abba	Abba	Abba	Bawa	Abo
2. Step father	Dada	Dada	Dada	Dada	Dada	
3. F. e. B.	Pipo	Pipo	Pipo	Pipo	Pipo	Bedo
4. F. y. B.	Dada	Dada	Dada	Dada	Dada	Bhawa- nak
5. F. e. B. W.	Peni	Peni	Peni	Peni	Peni	Bohn
6. F. y. B. W.	Kale	Kale	Kale	Kale	Kali	
7. F. e. S.	Chacho	Chacho	Chacho	Chacho	Bedo Chacho	Chacho
8. F. e. S. H.	Pinso	Bnerhe	Dada	Pinso	Bnerhe	Pipo
9. F. y. S.	Kali	Kale	Chacho	Chacho	Sarba Chacho	Biahma- ko
10. F. y. S. H.	Dada	Dada	Dada	Pinso	Bnerhe	Pinso
11. F. F.	Bedaba	Bedaba	Bedaba	Bedaba	Abo Pachgar	Bedaba
12. F. F. B.	Bedaba	Bedaba	Bedaba	Bedaba		
13. F. F. W.	Bediah	Bedaah	Bedaah	Bedaah	Bedio	Bedaah
14. F. F. S.		Chacho	Bediah			
15. F. F. H.		Bnerhe				
16. Elder brother	Bedobh Yah	Bedobh- yah	Bedobh yah	Bedobh yah	Bhyah	Bedobh yah
17. Mother	Ayah	Ayah	Ayah	Ayah	Dndu	Ayah
18. Step- mother		Kale	Aiah	Aiah	Kali	Kali

	RAJMAHAL.		PAKUR.			
Relation- ship terms.	Chota Pachurki	Borogotu	Bendar- kola	Danowar	Dohari hill	Makka Pahar.
19. M. e. S.	Peni	Peni	Peni	Peni	Peni	Peni
20. M. e. S. H.	Pipo	Pipo	Pipo	Pipo	Pipo	Pipo
21. M. y. S.	Kali	Kale	Kale	Kale	Kali	Aiamako
22. M. y. S. H.	Dada	Dada	Dada	Dada	Bnerhe	Dada
23. M. B.	Momma	Momma	Mumma	Mamu	Mamma	Mamma
24. M. B. W.	Mommi	Mommi	Mommi	Mami	Mammi	Mammi
25. M. F.	Bedaba	Bedaha	Bedaba	Bedaba	Abo Pachgar	Bedaba
26. M. M.	Bedawa	Bedawa	Bedawa	Bedawa	Dudu Pacho	Bedaah
27. e. B. W.	Bohu	Bohu	Bohu	Bohu	Bohu	Bohu
28. y. B.	Nunna	Nunna	Nunna	Bai	Ingdo	Biahma- ko
29. y. B. W.	Aler	Ar	Bohu	Ar	Miskador	Bachnak- po
30. Sister	Bai	Bai	Bai	Duiani	Ingdo	Bai
31. S. H.	Gouja	Ar	Bnerhe	Bnerhe	Ingdo- Jamer	Bnerhe
32. S. a.	Bhagna	Bhagna	Bhagna	Bhagna	Bhagna	Bhagna
33. S. D.	Bhagni	Bhagni	Bhagni	Bhagni	Bhagni	Bhagni
34. Wife	Peli		Bohn		Ingdo- kur	Ar
35. W. B.	Bachnak- po	Bhawa- gar		Sarha	Sarha	Samdhi
36. W. B. W.	Bachnak- po	Ar	Bohu		Ingsarha- doknr	Samdhi
37. W. e. S.	Ar	Bhygarni	Bai	Ar	Baihan- der-Bedo	Samdhi
38. W. e. S. H.	Ar		Bedobhai	Ar	Sarhiah	Samdhi

	RAJMAHAL.		PAKUR.			
Relation- ship terms.	Ohota Pachurki	Borogotu	Pendar- kola	Daudwar	Dohari hill	Makka Pahar.
39. W. y. S.	Sarhi	Sarhi	Nunni	Sarhi	Ingsarhi	Samdhi
40. W. y. S. H.	Sarha	Ar	Nunna	Sarha	Sarhia	Samdhi
41. Son	Nunna	Nunna	Nunna	Nunna	Nunna	Maker
42. Son's wife	Ar	Ar	Nunna bohu	Nuna- dabe		Bachnak- po
43. W. F.	Bachnak- po Ahba- gare	Bachnak- po	Bachnak- po	Bachnak- po	Ahba- hander	Samdhi
44. W. M.	Aiahgare	Aiahgare	Aiahgare	Aiahgare	Dudu- hander	Samdhi
45. S.W.F. D.H.F.	Samedhi	Samedhi	Samdhi	Samedhi		
46. S.W.M. D.H.M.	Samedhi	Samedhi	Samdhi	Samedhi		
47. Daugh- ter	Nunni	Nunni	Nunni	Nunni	Nunni	Makari
48. D. H.	Nunni- daber	Nunni- daber	Janbai	Nunni- dabe		Mangwo
49. Hus- band	ORE				Ingha- dabe	ORE
50. H. a. B.	Ar	Bha- garb		Bha- hande		
51. H. e. B. W.	Ar	Ar	Ar	Ar	Ar	Ar
52. H. y. B.	Sarha	Sarhe	Bobui	Ar		
53. H. S.	Bachnak po	Rnarhi	Ba- bahin	Baibande	Bai	
54. H. S. H.	Bachnak- po	Rnarhe		Ar	Bnerhe	

Father : F ; Sister : S ; Daughter : D ;

Brother : B ; Wife : W ; Son : s ;

Mother : M ; Husband H ; Elder ; e ;

Younger : y.

Government.

The Paharias form a distinct political organization other than the British Government. There is, however, every influence of the British Government but the internal government is quite an independent one. The Government is particularly interested with the chiefs in the election of whom even the Government has no hand. The chief is elected by the people themselves but it is subject to the confirmation of the Government. These chiefs are each usually the owner of some four to five scores of village. The chief (Sardar) is all in all in his territory. The Sardar acts as a judge in the village tribunal of petty affairs such as theft, burglary, adultery, etc; whereas murder, suicide etc., are sent before the Divisional Court of Justice. The Sardar, however, has an important part when such cases go up for judgment in a court of justice.

The remuneration of a Sardar is Rs. 10/- per month. As a symbol of his office a Sardar is supplied with a turban from the Government, with a metal monogram "S" mounted on it. The Sardar himself appoints the other officials under him to maintain peace and order in his villages. The Sardars are, also, to keep the daily death and birth registers of the villages under them, which they are to submit to the Government.

Next to the Sardars are the Naibs who help the Sardars in the proper affairs of the organization. The Naibs are the heads of 16 to 20 villages and very often there are four to six Naibs

under a Sardar. These people get each a remuneration of Rs. 3/- per month from the Government.

Each village has its local headman known as the Manjhi. The main function of the Manjhi is to look after the welfare of the village and to serve as a priest in the village worship. His Government duty consists in the collection of taxes from the village people. These taxes are to be deposited in the Divisional Court of Justice. His own remuneration is only a commission on the total amount of taxes collected. The commission, if paid within the announced date, is allowed at the rate of two annas *per* rupee, if paid after it, comes down to one anna and six pies *per* rupee, and in case of arrears it is allowed at the rate of one anna *per* rupee. The village headman is always sent for, whenever there is an occurrence of mischief or anything in the village.

Finally, comes the village watchman or chowkidar. His duty is to guard the village from the ravages of the wicked. The chowkidar is to carry the news of daily death and birth to the chief, who records them in a book. The chiefs, in most cases, are not literate and in such cases they employ a literate assistant for it. This person is very often a literate Santal and he is designated as 'Patwari'. Apart from the death and birth rates, all other information as regards the well-being or otherwise of the village is reported by these chowkidars. The remuneration he gets is 12 seers of wood and four annas in cash, from each family in the village, every year.

The system of keeping chowkidars has not been in vogue in all the hills, under all chiefs. My information is mainly based upon the recent introduction by the Sardar of Bendārkolā (Rajmahal, Berio) in imitation of the practice in the plains. Moreover, the services of chowkidars are not required unless the chiefs have to control a large number of villages. The chief of Bendārkolā has got six chowkidars under him and four Naibs.

Family.

The Family among these people consists mainly of the husband, the wife and the young unmarried children. This biological family is met with in 98 per cent of the population. Occasionally young children of brothers and sisters, who have lost their parents at an early age happen to be members of the family. In the family both the sexes work for food. Widows with children, if they are too old to be remarried, are also supported by their sons. In such a case, a small hut is raised for her alone and the widow works for her own livelihood. She carries wood in the market and thereby maintains herself quite aloof from that of her sons.

The Malers are strictly monogamous, although polygamy is not unknown among the richer folk. Some of the chiefs have got two wives. The bride price is very high and this makes monogamy so widespread. I have seen an unmarried youth, aged about 35, serving under the chief of Bendārkolā, who could not secure a bride for want of money.

Descent.

Descent in all cases is patrilineal ; properties are also held in the male line. The Mānjhiship is hereditary. The eldest son succeeds his father. If the eldest son is dead or not available the next brother holds the office. He, in his turn, is succeeded by his eldest son.

The office of the chief is not hereditary, in the strict sense, but with the association of the Mānjhiship it has been made a hereditary one. Every chief holds the Mānjhiship of his own village. The present Sardar of the Dohari Hill village furnishes an instance of it. Every chief, as we have already related, is entitled to a remuneration of Rs. 10/- per month from the Government, but the chief of this hill by way of penalty for successive offences, has been deprived of the above remuneration from the Government. Along with it, there was a desire expressed by some villagers that the chieftainship should be transferred to some other man. The above-named chief prayed for the post without the remuneration as he has been continuing up till now (October 1929), but the Mānjhiship has been transferred to another Pahāriā of the same village. Necessarily here, the sons of the above chief are not hereditarily entitled to the post of chieftainship ; there must be other candidates applying for the same along with the sons of the above mentioned chief.

Older records also confirm the statement that the Mānjhiship and the chieftainship were combined in one. In Lt. Shaw's account, the chief is known as 'Sirdar Mangy' which certainly goes to designate

the combination of both the chieftainship and the Manjhiship in one man. Some unpublished manuscripts, preserved in the Imperial Records Office, Government of India, in connection with these Paharias also refer to the same.

Property and inheritance.

Very few Malers own an independent area of land as property. The richer folk only can afford to have it. It happens in most villages that the majority of the villagers serve on the lands of the Manjhi. Some tend his cattle, some collect the weeds in his fields, some plough his land. Apart from this, the other villagers are bound to be content with the daily income from the sale of wood or Sabai grass, where it is available. As regards the inheritance of property there is no full-fledged law. Earlier authorities are lacking in information about this also. No reference to this is met with in Shaw's account and also that of Col. Sherwell. Mr. Bainbridge simply says; "If a man has ten heads of cattle and two sons—the eldest will get six heads of the cattle while the younger the rest four".¹⁰ But this is not always the case.

While collecting my data, I asked these people several questions relating to the inheritance of property in the case of the widow of the youngest brother, who in no circumstance can be married by any other brother of the family. There are actually a few families which consist of several brothers and their wives. The first reply they gave was that

¹⁰ Bainbridge, R. B.—*Memoirs, Asiatic Society of Bengal*, Volume IV, page 59.

she will marry any other man. When reminded that she was too old for marrying again they replied that she will earn her own living. They could not answer anything when asked of the parallel cousins of two or three brothers. They simply replied all will get equal shares.

The concept of property appears to be very crude; this is because everybody does not care for it. Each family depends upon the wages of daily labour. Girls and boys, scarcely ten years old, are seen carrying heavy bundles of wood to the market.

Position of women.

The position of women cannot be called low among these people, particularly when we find that both the sexes share the same troubles for the welfare of the family. But the womenfolk, naturally, are led to work more because some duties are particularly allotted to them. They are usually responsible for the nursing of the children and the cooking, together with the household duties of hulling etc. In Bendarkola, I met with a father left in charge of a young baby child scarcely ten months old, while the mother had been to the market.

The males never behave rudely to their wives. The husband and the wife are generally united in bonds of true love and affection; and we have in the account of Lt. Shaw a long discourse on such attachment. He writes about it as follows:—

"The hill lads and lasses are represented as forming very romantic attachment exhibiting the spectacle of real lovers 'sighing like furnaces' and the cockney expression of 'keeping company' is

peculiarly applicable to their courtship. If separated only for an hour, they are miserable, but there are apparently few obstacles to their enjoyment of each other's society, as they work together, go to the market together, eat together and sleep together. But if it be found that they have overstepped the prescribed limit of hilling cooing, the elders declare them to be out of the pale, and the blood of an animal must be shed at their expense to wash away the indiscretion and obtain their readmission into society".¹¹

Oaths and Ordeals:

Adultery is much hated in theory though a few may indulged in it in secret. On festive occasions, it comes out to the open,—the rice-beer adding impetus to it. When any charge of adultery is brought against a man, the Mānji settles the affair by imposing a fine of two or three pigs, according to the status of the man. These animals are sacrificed in a place of worship (usually in the village-deity-thān) and the blood is sprinkled upon purify them the culprits to so that the sin may be washed away by the sanctified blood.

To prove innocence in such a case, the women-folk,, specially,, are to undergo a very serious ordeal. A piece of iron is heated red hot in the furnace and over it a small quantity of salt is placed which the woman is asked to touch by her tongue. If the tongue gets sore she is adjudged guilty; if not, she is declared to be chaste and innocent.

This is now more a tradition than

¹¹ Dalton, E. T.—*The Descriptive Ethnology of Bengal*, Calcutta, 1872, Page 273.

a living custom. Naturally when a charge is brought against anybody—he is fined and a feast follows at the expense of the culprit. The accused, whether he be a true culprit or not, is bound to pay the fine for fear of losing his status in society.

Taboos.

It is a custom among these people, particularly in the north-western parts of the Rajmahal subdivision, that a man will never sleep with his wife on the same cot. They have always two separate cots. I met with some laxity of this custom in the northern part of Pakur subdivision. There the villagers seem to be acquainted with this custom but they are not strict about it. In other parts of the hills I did not meet with this custom. In the north-western parts of the Rajmahal subdivision a man cannot even touch a cot of a woman and *vice versa*. Lt. Shaw refers to this latter custom only and he mentions also the penalty to be charged in the case of the violation of this rule.¹² Sexual intercourse is said to be always done outside the house.

A woman cannot touch anybody nor can she cook during the period of her menstrual flow. She is also liable to observe such a taboo for five days in the lying-in-room.

Women are not allowed to attend a funeral party. They cannot even go to a graveyard.

Associations.

The only kind of association we meet with

¹² Lt. Shaw—*Asiatic Researches*, Vol. IV. Page 91.

among these people is the bachelors' dormitory. The existence of this institution is at present rather rare. From such places as I have visited, it can be well inferred that this institution was at one time widespread throughout the whole of the Maler country. Formerly there were two dormitories—one for the bachelors' and another for the maidens. I have come across the presence of two dormitories, one for each sex, in only two villages. One in the Rajmahal subdivision (Chakradhosara) and one in Pakur subdivision (Dohāri Hill). The dormitory is known among these people as 'Kodbāhā';—that for the bachelors' is known as *Chelak Kodbāhā* whereas the other for the maids is known as *Batyni Kodbāhā*. The house for the males is also known as *Dhāngriā-ghar* and the term *Dhāngriā* in *Pabariā* means an unmarried male. This term is applied to anybody above ten years of age. In Rajmahal subdivision the corresponding term *Batyni* means an unmarried female of about the same age as the male *Dhāngriā*.

The age of admittance to the *Kodbāhā* is from 10 to 12 years and one is to remain here till he is married; but this is now so more in theory than in practice. I have asked the youths of all the villages having any *Kodbāhā* as to where they sleep at night, but very few mention the *Kodbāhā*. In the Dohāri Hill the two dormitories, one for each sex, are just in front of each other. The houses are in an extremely wretched condition. The bachelors' house has been the residence of the pigs, and that for the females was then

stacked up with the new harvest of the Sardar. Inside the bachelors' house an old mat is spread on one side of the room—a few agricultural implements are pushed into the ceiling and on the thatch wall a large number of peacock-feathers are wrapped up in a cloth. Neither the bachelors' dormitory nor the maidens' appears to be used at present.

The distribution of this association in the Pakur-Goddā line is very curious. In Surajberā, I met with only the bachelors' dormitory. Here the house is more dilapidated than the ones I met with on the Dohari Hill, showing the absence of any human care for a considerable time. Half of the roof has been blown away by the wind and like the one on Dohari Hill it is also a pig-sty. The villagers here seem to have never heard of the corresponding dormitory for the females. In Kunjbonā, I had the same reply as above. The bachelors' dormitory is only present but does not show at present any trace of its proper use. In Simlong, I was informed that the bachelors' dormitory existed when the present elderly villagers, who are now between 35 to 45, were Dhangriās themselves. There is nothing of the kind at present. It is a matter of great interest that the disintegration of the institution has happened within the memory of the villagers. I could not gather any information about the maidens' dormitory here. Neither admissions into nor the leave-taking from these dormitories are ceremonially observed.

As we proceed we shall see that a large number of old tribal customs have either changed or have become obsolete among these people. We shall find this more particularly in the burial customs and in religious practices. One wonders whether the same sort of disintegration has also occurred with the clan system of these people. Evidence of this is also not at all wanting, and for this fact I am indebted to Rai Bahadur Sarat Chandra Roy. He met with such a confusion during his investigations on the clan system among the Juangs of Orissā. Risley's observations on the Khands are also worth mentioning here. "I have had the greatest difficulty in ascertaining the precise form of exogamy practised by them, and indeed in getting any information at all on the subject. * The rules which govern the custom of exogamy, and the caste or tribal divisions by means of which that custom is worked concern the inner life of the people, and leave no trace of their relations with the outside world. They are a sort of shibboleth, understood only by members of the tribe itself. Even among them this knowledge is often confined to heads of families or villages, priests, genealogists, match-makers and such matrimonial arrangements of the tribe". ¹²

¹² Risley, H. H. *The Tribes and Castes of Bengal*, (Calcutta, 1891) Vol. I, page 399.

III. CASTE, RACE, AND RELIGION IN INDIA.

By the *Editor*.

III.

Racial Elements of the Indian Population.

In the last article of this series, I have discussed most of the modern theories of the origin and growth of Caste, and endeavoured to show that though, between themselves, they bring out the salient features of the caste-complex, and serve as valuable aids in tracing the development of the different features of the caste system, they do not generally appear to go deep down to the very roots of the institution.

Before I proceed to a discussion of the ancient Indian theory of caste and set forth my own conclusions regarding caste-origins, it will be helpful to have as clear an idea as materials so far available may furnish regarding the racial elements and the cultural ideals that existed in the country before the Āryan immigration. So, in the present chapter I shall enumerate the various racial elements that appear to have entered into the composition of the Indian population, and in the next paper, I shall endeavour to form an estimate of the cultural ideals of the main elements of India's pre-Āryan population, and particularly their respective contributions to the ensemble of features that constitute the Hindu system of caste, culture and religion.

As for the main racial elements that have entered into the composition of the Indian people, general authoritative opinion until recently indicated four such elements,—namely, the dolicho-

platyrrhine Pre-Dravidian element, the generally dolicho-mesorrhine but very variable Dravidian or Mediterranean element (with platyrrhiny towards the north and south-east of the Dravidian area, and increasing leptorrhiny in the south-west as among the Nayars of Malabar), the brachycephalic Mongolian element, and the dolichocephalic and leptorrhine Porto-Nordio or Aryan element. In the light of recent researches a brachy-leptorrhine Alpine or Armenoid-Alpine element, a Negrito element and a few composite minor elements have to be added.

It need hardly be noted that all accounts of the racial composition and the early racial history of India must necessarily be more or less conjectural and, as such, liable to modification with any future discovery of fresh materials.

There is a tendency among some modern Indian scholars to discard the theory of the immigration into India of Indo-Aryans from outside, and a few are even inclined to think that the cultured Dravidian castes of Southern India also formed one race with those generally described as Indo-Aryans. So far as our available evidence goes, the utmost that can be said is that the northern and north-western boundaries of the country of the Indo-Aryans at one time most probably extended considerably beyond its present limits and that the further progress of Indo-Aryan occupation of what is now known as Hindusthan was merely a movement south and south-eastwards from the

then northern and north-western areas of what might be called 'Greater India'.

As for the long-headed Dravidians of the Mediterranean race with a subsequent admixture of Pre-Dravidian elements, and the broad-headed and medium-headed Gujaratis, Bengalis and others of supposed Alpine affinities with probably a mixture of other elements, it may be said that in a sense there is a fundamental racial unity in the main population of both northern and southern India, —for both the Mediterraneans and the Alpines are but different branches of the same Caucasian race, and even the Pre-Dravidians would appear to belong to an earlier branch of the same Caucasian race. Indeed, as we shall see, ancient Hindu sociologists would appear to have ignored distinctions of race as leading to separatism and regarded the whole of mankind as an organic unity presenting primarily three or four psychological types.

The following inferences that may be provisionally drawn from the inadequate data so far available, might perhaps appear to be on the whole fairly probable and reasonable although by no means certain, much less final.

1. *Negrito Element.*

The earliest inhabitants of the country were in all probability a short, black, curly-haired Negrito race¹⁰⁴ allied to the brachy-

¹⁰⁴ They might perhaps have been occupying India from a time when Peninsular India was more or less cut off from Northern India by the "Rajputana sea."

cephalic Miocopsis of the Andaman Islands, the brachy-cephalic Aetas of the Philippines, or perhaps the mesocephalic Semangs of the Malay Peninsula. Their only traces might perhaps be found to-day in the curly hair, dwarfish stature, snub nose, and certain other features occasionally met with among such wild hill-tribes of the extreme south of India as the Kadars and Urulas of Travancore, and in rarer instances among a few of the hill-tribes of the Central Hill Belt of India. Dr. J. H. Hutton in the latest *Census Report of India*¹⁰⁵ writes: "In the Kadars and Urulas of the forests of the extreme South of India occasional individuals with frizzly hair and low stature and Negro-like features are very suggestive of survivals of the Negrito race." They are generally supposed to have come through the north-east.

Before now, the theory of such a Negrito survival in Southern India, particularly among the Kadar, has been several times advanced and sometimes denied. But now Dr. Hutton declares that the results of the anthropometrical measurements taken by Dr. B. S. Guha of the Zoological Survey of India, which will be published in Volume III of the *Report of the Census of India*, will satisfy sceptics on the point and conclude the question.¹⁰⁶

Dr. Hutton further informs us that traces of a Negrito stock "appear to exist in the inaccessible areas between Assam and Burma, where a dwarfish stature is combined with frizzly hair

¹⁰⁵ P. 444.

¹⁰⁶ *Ibid*, p. 442.

such as appear to result from recent admixtures of the pure or virtually pure Negrito stock of the Andamans with blood from the mainland of India or Burma.¹⁰⁷ In further corroboration of a submerged Negrito element in the Indian population, Dr. Hutton refers also to "legends among the Kuki and the Kachari tribes of Assam of their former contact with and the extermination of a dwarf race armed with bows and spears living in dense forests and of an implacable hostility such as that still displayed by the Jarawas of Great Island to all their neighbours."¹⁰⁸

Besides the Kadar and the Urali, other South-Indian aboriginal tribes such as the Chenchu, the Sholagar, and the Arandan, classed together, in the last *Census Report of India*, in the same group with the Kadar and the Urali, and all together numbering 15,641 persons, may possibly have traces of Negrito affinities.

(2) *Pre-Dravidians.*

If not contemporaneous with the Negritos, at any rate absorbing and immediately succeeding them in the occupation of India, was a dolichocephalic Pre-Dravidian or, as they or sections of them are sometimes called, 'Proto-Australoid' race. This racial element would appear to enter largely into the composition of the lowest stratum of the Indian population. Their unabsorbed remnants are spread over the whole of the Indian continent, with their main strong-hold in the hills and plateaus of the Central Belt of India between 18° and

¹⁰⁷ *Ibid.*, p. 443.

¹⁰⁸ *Ibid.*, p. 443.

26° North Latitude. Sufficient materials do not appear to exist to justify a racial differentiation of the Austric Māṇḍā-speaking Pre-Dravidian tribes of northern and central India from the Dravidian-speaking Pre-Dravidian tribes mostly of southern India. It appears to be more consistent with existing facts and probabilities to think that both belonged originally to the same racial stock, although differences in subsequent racial and to a still less extent cultural history may have since produced certain minor differences in physical appearance and, still less, in cultural equipment.

The Indian Pre-Dravidian type has been associated by some authorities with the Australian aborigines in the far south-east, and by Colonel Sewell,¹⁰⁹ a noted biologist and a former Director of the Zoological Survey of India, with the Rhodesian skull in the far south-west. On the basis, again, of the discovery made in 1925 by Mr. Furville-Petre in the deepest part of the palaeolithic stratum below the floor of Rohrer's cave in Galilee, of the skeletal remains of a variant of the Neanderthal type, Dr. Hutton thinks that the origin of the Pre-Dravidians, or as he calls their southern section the "Proto-Australoids," must have been in Palestine. But it may be doubted whether a conclusion like this, though not improbable, is justified by such slender evidence.¹¹⁰

¹⁰⁹ *Proceedings of the Sixteenth Indian Science Congress*, pp. 333 ff.

¹¹⁰ Whereas Pater Schmidt has traced affinities of the Munda languages with the Mon-Khmer, Khasi and other allied languages on the one hand, thus forming what he terms the

Wherever the Pre-Dravidian might have originated, whether in India itself as their own traditions generally assert, or whether they came from the hypothetical submerged Lemurian continent as some have supposed, or whether from the north-east or the north-west beyond India, as have been variously suggested, the racial type of

Austro-Asiatic languages and forming together with the related Austronesian (Polynesian, Melanesian and Indonesian) languages, the 'Austrio' linguistic family extending from Easter Island near the South-American coast to Madagascar and from New Zealand up to the Punjab, Mr. F. A. Uxbond, on the other hand, in his book entitled *Munda-Magayar-Maori* (Luzac, 1928) would further extend the territorial limits of the "Austrio" family to the other side of the hemisphere by connecting the Magyar dialects of the Hungarians of the Carpathian basin with the Munda and the Polynesian languages. Mr. W. F. De Hovey, (*Bulletin of the School of Oriental Studies*, London Institution, Vol. VI, Part I) disputes the existence of an Austrio family at all, and suggests that the Munda languages belong to the "Finno-Ugrian" family. M. P. Rivet in a paper on "Le Groupe Oceanien" (*Proceedings of the Third Pan-Pacific Science Congress*, Tokyo, 1926)—points out that the Australian language shows in its vocabulary a very large number of similarities with the Malayo-Polynesian languages, and much more with the Austro-Asiatic languages (Munda and Mon-Khmer) which, taken together, form Schmidt's "Austrio" linguistic family. Rivet suggests that this new linguistic family should be called the "Oceanian Group" including the Australian, Malayo-polynesian and Austroasiatic languages. He further contends that "this linguistic entity agrees neither with the ethnic, nor the ethnographic entity" and "must have been born secondarily, and in this the language of one of the tribes must have been forced upon the other tribes through some motives or conditions at present unknown." He further supposes that the centre from which all these peoples migrated was either in the Indian Archipelago or in Southern Asia, and their spreading was almost entirely by sea.

the Indian Proto-Australoid or Pre-Dravidian would appear to have been ultimately fixed in India under the influence of Indian climatic conditions. They are thus, as Dr. Hutton points out, the true aborigines of India. From them appear to have descended most of the tribes whom we style the Indian aborigines, although some branches of them would appear to have been slightly differentiated from the rest in time through different environmental conditions and cultural and, perhaps to a less extent, racial admixture with subsequent incoming races. Certain sections of them, particularly in Southern India, might have absorbed the more primitive Negritio population, and perhaps hardly any section escaped some Negritic admixture. As I have said, at the present day these Pre-Dravidians are congregated mostly in the Central Hill Belt of India, but the traditions of some sections of them point to northern India as having once been their home, and certain traces in place-names, popular vocabulary, and local traditions in parts of northern India may appear to lend support to such tribal traditions. Beyond India, their linguistic and, to some extent, perhaps racial affinities may be traced sporadically through Burma and the Malay Peninsula to distant Australia on the south-east. To the South, the Veddahe of Ceylon probably represent a primitive offshoot of the same stock. The probabilities would seem to favour the theory of the original migration of the Pre-Dravidians from the north-west beyond India,

The Pre-Dravidians of India now fall into two divisions—the Munda-speaking and the Dravidian-speaking,—those Pre-Dravidian tribes who lived on in continental India and retained their original speech, and those others who proceeded to peninsular India, south of the Vindhyan ranges and the Godavari river, and adopted Dravidian dialects. The languages of the northern Pre-Dravidians were to some extent modified probably through the influence of the languages of later immigrants, particularly the Mediterranean 'Asure' (ancient 'Dravidians' of northern and north-eastern India) whose blood, too, appears to have been partially absorbed by some of the more advanced among the Munda tribes such as the Munda, the Ho, the Bhumij, the Santal, and the Kharia. As noted above, a strain of Negroid admixture may also be suspected in this northern branch, although to a lesser degree than in the southern branch. The Munda-speaking tribes, in their turn, perhaps influenced, to a more or less extent, the languages and physical features of the descendants of some of the later immigrants into northern India, particularly north-central and north-eastern India. The dialects of the southern Pre-Dravidians were either replaced or transformed beyond recognition by the speech of the later Dravidian immigrants into the South, and their physical features, besides being probably modified to some extent through absorption of the more primitive pre-existing tribes of Negrito affinities, would also appear, in a few cases, to have been somewhat improved through assimilation of a strain of

Dravidian blood. The Pre-Dravidians, in their turn, must have also modified the subsequent Dravidian immigrants through racial and cultural admixture to a certain extent, and thus given rise, for one thing, to the considerable variability that now marks the physical features of different Dravidian castes—from a fine type with more or less narrow noses to a coaree type with broad noses. Very much later, a few of the Dravidian-speaking Pre-Dravidian tribes, such as the Goṇḍs with their various branches in different grades of culture, and the Khond, the Kuṛukh or Orāṇ, and the Malō or Sauria Pabāriā, were pushed back northwards to the hills and plateaus of the Central Hill-belt of India.

Besides the Muṇḍā-speaking and the Dravidian-speaking Pre-Dravidian tribes, there are a number of other Pre-Dravidian tribes in northern and central India who once appear to have spoken Muṇḍā languages but have long since lost their original speech and now speak corrupt forms of the Samskritie speech common to the Hindus of their respective areas. Such are the Bhūiyas, the Cheros, the Kolis, the Chodhras and several other tribes. In some tribes, the process is still in progress as among the Bhils of Western India and the Bhumij of Chōṭa-Nāgpur (only a small proportion of whom still retain their old tribal speech).

Though the Pre-Dravidians now mostly congregate in the Central Belt, traces of their occupation at one time of almost the entire Indian continent may still be seen in the sea-

tures of the lowest stratum of the Indian population—mostly the so-called ‘Depressed’ classes,’ or, to use their most recent appellation, the ‘Harijans.’

The Pre-Dravidian tribes may be classified into—
 (i) The Muṇḍa group (styled ‘Kol’ group in the *Census Report of India*, 1931) numbering much over sixty-two *lakhs*, and comprising the Muṇḍa, the Hō (including Kol), the Bhumij the Santāl (including Ghaṭwar), the Bihār, the Asur and Agaria, the Birjia, the Kharia, the Korwa and Korku, the Juang, the Savara or Saora (including Saonr and Saharia), the Gadava, the Turi or Mahli, the Majhwar, the Binjha, the Baiga, the Bhaina, the Bhūiya (with their degenerate branch the Musahar), the Bhūnja, the Bhūmia, the Chero, the Kharwar, the Bhōgta, the Nagesia, the Parhaiya, and the Pahia.

(ii) The Bhil and Koli groups of the west, probably branches of the Muṇḍa group (who, like the Bhūiya, have now mostly lost their old tribal languages and adopted corrupt forms of Aryan speech), number over seventy-one *lakhs* and comprise the Bhil, the Bhillala, the Barila, the Chodhra, the Dhanka, the Mankar, the Mavehi, the Pathia, the Yadvi, the Girasia, the Mina, the Meo, the Mer, the Metrai, the Koli, the Bhalla, the Bazia, the Gedia, the Khant, the Thakarda, the Talahda, and the Valvi.

(iii) The Dravidian-speaking group¹¹¹ of Pre-Dra-

¹¹¹ These are classed in the *Census Report of India*, 1931, into two groups as the “Oraon group” and the “Gond group.”

vidians, numbering over sixty-six *lakhs* and comprising the Kuṛukh or Oraon (including Dhāngar), the Malē or Sauria Pahāṛiā (and their Hinduised branch the Mal Pahāṛiā), the Gond (including the Maṛiā), the Khond or Kui, the Kāwār, the Dhanwar, the Kalotā, the Kāmar, the Kolām, the Konḍā, the Dorā, the Koya, the Muriā, the Nagarchi, the Bhātra, the Pardhān, and the Parjā or Parojā.

(iv) The South Indian group, all of whom are more or less Hinduised, altogether numbering about a *lakh* (more accurately, 98,776) and comprising the Eravallan of the Cochin State, the Kudiya and the Marratha of Coorg and Madras, the Kurichhan, the Kuruman, the Mavillan, the Malasar, the Paniyan and the Palliyan of the Madras Presidency, may also, I think, be classed generally among the Dravidian-speaking Pre-Dravidians.

(v) The primitive pastoral tribe of the Toda (now numbering only 597) of the Nilgiri Hills, whose origin is uncertain, probably form a class apart, unless they constitute a remote and degenerate branch of the Dravidian Mediterraneans.

(3) *Mongoloid Strain.*

The elusive Mongoloid touch in the facial appearance of certain Mūṇḍa tribes to which several writers have referred, has been attributed by Hutton to a slight strain of Paroean or southern Mongoloid blood, which he suggests might have come from the east across the Bay of Bengal. The suspicion of a Mongoloid element, if it has any

real basis in fact, would only attach, as Haddon says, to something in the facial appearance of certain tribes.¹¹² Such anthropometrical measurements as have been so far taken by us among the Pre-Dravidian tribes of Chōṭā Nagpur and Ōṛiseā do not reveal any tangible Mongolian physical trait among them except an occasional obliquity in the eyes in some tribes which, however, is not uncommon even among certain non-Muṇḍā communities and higher Hindu castes. But the results yet unpublished, of Dr. B. S. Guha's measurements, we are assured by Dr. Hutton, have placed the existence of such a strain beyond question; and we all await those results with interest. It may be noted that occasionally among some Muṇḍā tribes—even such primitive jungle and hill tribes as the Juang,—one comes across an individual of a pale whitish colour. And one or two cultural traits which I observed among the Juang of Keonjhar are reminiscent of the Nagas of Assam. Thus I was surprised to find here and there small pile-huts used, not indeed for human habitation as among the Nagas, but for keeping the Juang's goats. And the profusion of red bead-necklaces worn, tier upon tier, by Juang women also reminds one of Naga women. But not more than one or two out of over one hundred Juangs whose anthropometric measurements we took revealed any tangible Mongloid trait.

(4) *Mongolian Element.*

The actual Mongoloids of India are mostly

¹¹² Haddon, *Races of Man* [1929], pp. 20, 108.

found in certain sub-Himalayan tracts, principally in Assam, where an originally long-headed Pre-Dravidian with perhaps some slight Proto-Negroid substratum has been over-laid and submerged by aggressive broad-headed Indo-Chinese Mongolian elements—Tibeto-Burman, Tai or Shan, as well as a Nesiote or Indonesian and a Pareocean or Southern Mongoloid element. And, finally, an Indo-Āryan element has also contributed its share to the formation of the composite Assamese people. The Mongolian race-movement from the north which commenced early, in successive waves of immigration into Assam, does not appear to have yet ended. The Tibeto-Burman Shans who finally conquered Assam in the 13th century, assumed, in 1228 A.D., the name of 'Ahom'; and after them the country came to be called 'Assam.' The Mongoloid Shingpho or Chingpo (Kachin of Burma) arrived from the Upper waters of the Irāwady about that time.

The Khasis and the Syntengs were, as Sir Edward Gait suggests, probably the earliest Mongolian overflow into India. They number about two and one-third *lakhs*, and still retain the only surviving dialect of the Mon-Khmer family of languages. To the *Tai*-group of the Indo-Chinese linguistic family belong the Khamti, the Shan (including Phakial and Aitonias), and the Ahom,—altogether numbering between themselves over eleven and a half *lakhs*. To the *Bodo* group numbering nearly seven *lakhs*, belong the Garo, the Kachari (comprising the Dimsa or Hill Kachari and the Meoh or Plains Kachari), the

Rabha, the Koch, the Tipra, the Lalung, and the Hajong. To the *Kuki-Chin* group, numbering over two and a half lakhs, belong the Meithei or Manipuri and the various Old and New Kuki sub-groups. To the *Northern Chin* sub-group of this Kuki-Chin group belong the Thado-Kuki and the speakers of the Paite, Ralle and Sokte dialects. To the *Central Chin* sub-group belong the Lakher and the Lushei or Dulan. To the *Chin* group also belong the Poi or Chin and Yahao of the Lushai hills. The connecting link between the Bodo and the Kuki-Chin groups of the Assam-Burmese border is formed by the Mikir. To the *Kachin* group belong the Kachin or Singpho. To the *Tibeto-Burman* sub-family belong the Abor, the Miri, the Aka, the Dafia and the Mismi. To the *Naga* group of the Assam-Burmese branch belong the numerous Naga tribes such as the Angami, the Sema, the Ao, the Lotha, the Rengma, the Kachha, the Kabni, the Kezhama, the Tangkhul, the Sangtam, the Memi, the Phom, the Kalyo-Kengnong, the Yachami, and the Rangpang and some other tribes. To the Tibeto-Himalayan branch of the Tibeto-Chinese family belong such tribes as the Bhotia, the Magar, and the Limbu of Nepal, Sikkim, Bhutan and some adjoining tracts of British India.

(5) *Melanesian, Indonesian, and Polynesian Elements.*

The Melanesians of New Guinea, the Solomons, the New Hebrides, New Caledonia, the Fiji Islands, the Banks Islands, the Loyalty Islands and the Bismarck Archipelago, are believed to be a mixture of the indigenous Negrito race with

the Pre-Dravidian or 'Proto-Australoid' who came originally from India and are now represented primarily by the the Sakai of the Malay Peninsula (the Austric-speaking Aeta of the Phillipines and the Semang of East Sumatra and Malay Peninsula being Negritos allied to the Andamanese). Some anthropologists trace Melanassian racial elements with a Mongoloid admixture in the hilly regions separating Assam from Burma, and also, although without any marked Mongloid admixture, on the Malabar coast of India.

The Indonesians appear to have belonged in the main to a Caucasian stock and probably migrated from the lower valley of the Ganges and reached the East Indian Archipelago long after the Pre-Dravidian came there. On their way through Assam and Burma to Indonesia they probably came by some Mongolian admixture. In Indonesia they were later followed by Mongloid brachyccephals from south-east Asia who are now generally designated as "Proto-Malays." The latter in time came to dominate the Indonesians, and more or less absorbed them. Certain elements of culture in Southern India have led some anthropologists to suggest the possibility of "repercussions from the Indonesian area." There also appear to have been migrations of Indonesians along the Burma coast to the Assam hills.¹⁰⁸

Some writers also favour the theory of a

¹⁰⁸ *Census of India 1931, Vol. I., p. 445.*

Polynesian intrusion into Assam and the west coast of India.¹⁰⁰ Hornell suggested the presence of an intrusive Oceanic population on the coasts of Western India and Ceylon, "where today are seen the counterpart of the Polynesian single outrigger canoe and distinctly Polynesian types and customs." It is obviously suggested that as the Hovas of Madagascar who have social, linguistic and racial affinities with the Polynesians sailed southwestward from Polynesia to their present home in historic times, some of them probably settled down on the coasts of Southern India and Ceylon.

(6) *Dravidian Racial Element.*

The next immigration into India after the Pre-Dravidian was that of a proto-Mediterranean race who probably came in successive waves by way of Beluchistan where the Dravidian-speaking Brahui tribe, though presenting a non-Dravidian racial type, live to this day. Some sections might also have come by sea. One section of them probably passed down eastwards through Assam and Burma and, with an infiltration of Mongolian blood, probably became the Indonesian or Nesiote race now submerged.

The main body of these early Mediterranean immigrants into India, we may perhaps reasonably conjecture, in time gradually moved across the chain of hills that divide Northern India from Peninsular India. These would appear to have made themselves

¹⁰⁰ *The Problem of Polynesian Origins* (Bernice P. Bishop Museum. Occasional Papers, IX, 8; Honolulu, 1930), p. 11.

masters of what afterwards came to be known, after them, as the *Dravīḍa* country which might then have been sparsely inhabited by the Pre-Dravīḍians and perhaps some remnants of the original Negritos. The sections of these early Mediterranean immigrants who stayed on in Northern India were probably in course of time partly absorbed by the then Pre-Dravīḍian population of the North and partly by later Āryan immigrants.

Most of the Mediterranean immigrants into Southern India, whom we may call the Proto-Dravīḍians, and their descendants probably received varying degrees of infusion of Pre-Dravīḍian blood and gradually worked out a civilization now known as the Dravīḍian culture. The bulk of the present speakers of the Tamil, Telegu, Tulu, Canarese, and Malayalam languages appear to be the descendants of these earlier Mediterranean immigrants into Southern India and are now called the Dravīḍians. Besides a strain of pre-Dravīḍian blood, particularly in the lower classes, there appears to have been more or less infusion of Āryan blood in the higher castes, and some sections of South Indian Brāhmins are probably the descendants of later Āryan immigrants.

As anthropologists know, whereas the Nordic Āryan race is characterised by very light hair and blue or light gray eyes, tall stature and narrow or aquiline noses, the Mediterranean race is characterised by black or dark brown hair, dark eyes, medium stature, and rather

broad noses, though variable. Both the races, however, have long heads and faces. The Armenoid blend sometimes noticed among the Tamils in particular, may perhaps be attributable to long contact between India on the one hand, and Mesopotamia and other parts of Western Asia, on the other, particularly during the palmy days of the Indus Valley civilisation.

Sometime later, it would appear there came fresh waves of immigration into Northern India of a more advanced section of the Mediterranean stock. It is the descendants of these later Mediterranean immigrants of the north and possibly also here and there a few sections of the more advanced Pre-Dravidians, who resisted the progress of the Rigvedic Aryans along the river valleys of Northern India. These new comers are frequently mentioned in the Rig-Veda as the Asuras, Dasas and Dasyus. It was these Mediterranean Asuras who would appear to have first brought to India a knowledge of metallurgy and the manufacture and use of implements, weapons, ornaments and household utensils and ceremonial and other objects, made of copper, an improved method of pottery-making, and an improved method of agriculture by terracing and irrigating the fields. They would also appear to have practised urn-burial and raised megalithic memorials over the bones and ashes of their dead. Being much better equipped in the arts of life than the Pre-Dravidian who had till then been probably occupying the river-valleys of

northern India, this Mediterranean people would appear to have in time established their supremacy in the land. There are reasons for the speculation that the Mediterraneans and the Pre-Dravidians were both originally matrilineal peoples, and, in time, not a little intermixture of blood between the two races must have taken place in India. The more stubborn sections among the Pre-Dravidians would appear to have moved on to the South of the river-valleys as far as to the Vindhya, Kaimur, Mahadeo and Satpura ranges. This elevated central belt of India still forms the main stronghold of the Pre-Dravidian tribes. In the valleys of the northern rivers as also perhaps in the valleys of the Tapti and the Narmada in the middle west, and the Subarnarekha, and the Sanjay and the Betwa rivers of Chotā Nagpur and the Brahmani in Orissa, in the east, these Mediterranean Asurs appear to have been the dominant people until the advent of the Indo-Āryans.

From such expressions as 'Kṛiṣṇa tvacha' (black-skinned), 'anāsa' (nose-less), 'mṛidhra-vācha' (of halting speech), applied in the Rīg Veda to the enemies of the 'sacrificing' Āryans, it used to be generally supposed (and the present writer once shared this opinion which he expressed in his monograph on the *Mundas* in 1912), that the reference was to the snub-nosed, black-skinned Pre-Dravidians of India. But the weight of evidence and of authoritative opinion now favour the view that the communities to whom such epithets as 'kṛiṣṇatvacha,' 'anāsa,' 'mṛidhra-vācha,' 'Dāsa,' 'Dasyu,' and 'Asura' were applied, were mostly those

of the Mediterranean race who formed the dominant people in the river valleys of northern India when the Āryans appeared there. These terms are also taken by some to include even certain degenerate Vedic Āryans who came to neglect the customary sacrifices. Thus, Muir¹¹⁴ sayeth that none of the names of the Dasyus or Asuras mentioned in the Rigveda 'were of non-Aryan or indige-neous origin.' Roth in his *Lexicon* says, "It is but seldom, if at all, that the explanation of 'Dasyu' as referring to the non-Aryans—the bar-barians, is advisable."¹¹⁵ Dr. A.C. Das, on the other hand, in his *Rig Vedic India* writes, "The Asuras were 'dissenters' among the Aryans who were opposed to the worship of the Devas and performance of sacrifices." He thinks that 'Anāsa' really means 'mouth-less' (*na=no, āsa=mouth*) and not 'nose-less' or 'flat-nosed,' and compares it to 'mridhra-vācha,' also applied to the Asuras, which has been interpreted by Sayana in his Commentary on the Rig Veda (I, 174, 2) to mean "persons who cannot speak fluently or who speak softly." From the *Satapatha Brahmana* (iii, 2-1, 23-24) we learn that the Asuras instead of addressing their enemies as 'Hē arayah!' address-ed them (with a soft and liquid accent) as 'Hē alayah!'. As for the term 'black-skinned,' it has been supposed that the analogy of the 'black skin' was possibly drawn by the Rig Vedic Āryan from the colour of the cloud which was

¹¹⁴. *Original Sanskrit Texts* (1871), Vol II p. 387.

¹¹⁵ Quoted by A.C. Das, *Rig Vedic India*, p. 128.

regarded as the body of the demon *Vritra* who tormented the Āryans by captivating the life-giving rains within its compass and was compared along with his hosts, to the *Dāsas* or *Dasyus* of *Sapta-Sindhu* who stole the milk-giving cows of the settled Āryans."¹¹⁶ Dr. Das further quotes a passage from the *Gāthā Ustavaiti* where Zarathustra refers to the impious Deva-worshipping branch of the Āryans (as distinguished from the Āryans of Iran or Persia) as 'the black ones' on account of the difference of religious views.¹¹⁷

(7) *Alpine Racial Element.*

Another early immigration into India appears to have been that of a broad-headed Eurasiatic Alpine race probably from the Pamirs or perhaps from the Iranian plateau, towards or shortly after the end of the Mahen-jo-daro period. Whether they preceded or succeeded the second wave of Dravidian or 'Asura' immigration, it is very difficult, if not impossible, to determine. A section of this race appears to have spread southwards along the west coast as far down as Coorg, as being perhaps the direction of least resistance. These were the ancestors of the Mahrāṭṭa, Brāhman, Prabhus, Kunbis and some other broad-headed communities of Western India.

Another section of this race appears to have been the ancestors of the Gujrātīs on the west and the Bengalis on the east. Whether these

¹¹⁶ *Ibid*, p. 159.

¹¹⁷ *Ibid*, p. 128.

two sections of the Alpine immigrants to India came together (as would seem more likely) or one after the other it is difficult to conjecture. But it appears very probable that, at any rate, the ancestors of the Bengalis and Gujarātis had lived together in North-Western India for a considerable time and modified their speech and culture before they migrated, to their present respective habitats. Dr. D. R. Bhandarkar¹¹⁸ has pointed out some significant resemblances between the modern Bengalis and the Gujarātis. During a short stay in Gujarāt with Gujarāti families I was impressed with some temperamental affinities of the Gujarātis with the Bengalis besides some common customs and habits.

The Alpine racial type is characterised by a round head and face, light chest-nut hair, variable and a rather broad and heavy nose and medium height. Of this type, Ripley writes, "It is pre-eminently a mountain type, whether in France, Spain, Italy, Germany or Albania. It becomes less pure in proportion as we go east from the Carpathians across the great plains of European Russia."¹¹⁹ The generally fine noses and some other physical features of the higher classes of the Bengalis and the Gujarātis point to a certain amount of infusion of Nordic or Aryan blood in those classes. Similarly the coarser traits in the physical features of the lower S'ndra castes among the Bengalis, Gujarātis and the descendants of the other Indian

¹¹⁸ *Ibid*, p. 128-9.

¹¹⁹ Ripley, *Races of Europe*, p. 128.

Alpines, point to a considerable infusion of Pre-Dravidian blood in the lower classes,—some of the lowest classes (now commonly called ‘depressed castes’) having probably been originally mostly pre-Dravidian in blood. Dravidian racial as well cultural elements are also in evidence among the lower classes and to a small extent among the higher classes as well. It was probably during their residence in the Pamirs, where traces of Pais’achi dialects still exist, that the ancestors of the Indian Alpines had acquired an Indo-European or Aryan speech.

The migration of the ancestors of the Marhāttās, Kunbis, Konkans, Coorgs and others southward from the Punjab and those of the Gujarātis southwards along the western coast, and of the Bengalis eastwards by way of Central India and North-Bihar to Bengal¹²⁰, like a “wedge,” as Hoernle puts it, through masses of Indo-Aryan population, might be due either to some internal movements of peoples or to the pressure of the second wave of Indo-Aryan immigration into India.

¹²⁰ *Indian Antiquary*, for 1911, pp. 7-37. Thus both the Nagar-Brahmans of Bengal and the Kayasthas of Gujarat have such family names in common as Ghose, Mitra, Datta, Nag, Pal, etc.

Brachycephalic elements have been found throughout the Malwan plateau as far as Rewa; and again from Bihar eastwards there is a gradual increase of a brachycephalic element reaching its maximum intensity in Bengal. *Vide* Dr. B.S. Guha, *The Racial Origins of the Bengali* in the *Sir P. O. Ray-Commemoration Volume*, pp. 174-78.

(8) *Indo-Aryan Elements.*

At length, by about the second or third millenium before Christ, if not earlier,¹²¹ the Rig Vedic Aryans, probably in more than one successive horde, with their families and cattle, appeared, first, in all probability in the valleys of the Indus and its tributaries, and, later in the valleys of the Jumna and the Ganges, and in course of time carried their culture almost all over India. As may be inferred from traditions recorded in early Sanskrit literature, in the course of their gradual expansion they found the country occupied by a heterogeneous population of various degrees of racial admixture crystallised into countless tribes and classes and communities, speaking different languages and dialects, worshipping different gods, pursuing different occupations, following different customs and habits of life, possessing different social and political institutions and systems, avoiding in most cases social contact with one another, and in some parts co-ordinated under dynasties ruling over more or less wide areas. After various successes and reverses, the Aryans gradually succeeded in subjugating and conciliating some of the pre-existing tribes and communities, routing some, pushing forward others before them further to the east, driving some others to the south of

¹²¹ According to an ancient Hindu astronomical calculation, Aryan history of India begins in 6786 B.C. (i.e., two *satyayugas* or cycles or 5,400 years added to the year of coronation of King Parikshit in 1386 B.C.). See *Journal of the B. O. Research Society* vol. III, p. 260.

the river valleys, and amalgamating and absorbing large sections into their own fold and imposing upon them their own culture and social polity. The Aryans, too, in their turn, became not a little modified through racial and cultural contact and intermixture, particularly with the erstwhile dominant Dravidian or rather 'proto-Dravidian' inhabitants of Northern India who appear to have been denominated by them variously as 'Asurs,' 'Dasyus' and 'Dāsas,' in the Rīg Vedic period.

References in ancient Saṁskṛit literature to these pre-Aryan Asuras or northern proto-Dravidians would appear to indicate that they had already developed a material civilisation by no means inferior, and in some respects possibly superior, to that of the incoming Aryans themselves. In the Rīg Veda and in the Purāṇas and the great Epics we hear of the castles, cities, wealth, and 'magic' of the Asuras.

From an analysis of historical traditions embedded in ancient Saṁskṛit literature, particularly the Purāṇas and the two great Epics, F.E. Pargiter finds that "at the earliest time all the kings and chiefs throughout India, with two exceptions, belonged to one common stock," namely, the "Mānava" stock or the Solar race whom he identifies with the Dravidians.

The first exception was the Saudyumna stock, whom Pargiter identifies with the Austric-speaking Muṇḍā race "who occupied Gaya and the country eastward of a line drawn roughly from Gaya to Cuttack and the region north of the Ganges.

eastward of the Videha and the Vais'ālaka kingdoms." They would also appear to have had some connexion with the tribes of Uttara-Kuru and Kimpurnsa in the north-east where the "pronominalized Himalayan languages" are still spoken. "The Saudyumnas," Pargiter says, "had been almost overwhelmed by the Anavas and Pauravas, and were restricted to the Utkalas and other clans which occupied the hilly tracts from Gaya to Orissa. All North and East Bengal was held by the Prag-jyotisa kingdom, which is nowhere connected with any of these races and would seem to have been founded by an invasion of Mongolians from the north-east, though tradition is silent about this outlying development. The configuration of the five Anava Kingdoms in the east,—the Āngas, Vāṅgas, Puṇḍras, Suhmas and Kalingas,—which held all the sea-coast from Ganjam to the Ganges delta, and formed a long compact curved wedge with its base on the sea-coast and its point above Bhagalpur, suggests that there had also been an invasion from the sea, that penetrated up the Ganges valley, leaving the hilly tracts on its west and east alone; and this conjecture, if reasonable, would mean that the invaders had driven those Saudyumnas stocks into those hilly tracts, and that that had taken place before those five kingdoms were formed. But there is no trace in tradition of any such invasion of this distant region."

The second exception was the Āryan or, as Pargiter calls them, Aila stock or Lunar race which is said

to have begun their domination in a small principality at Allahabad (Pratisthāna). "The Mānava (Dravidian) city of Ayodhya is made the most ancient, and these allegations imply that civilization was so far advanced (or perhaps more so) among the Mānavas as among the Ailas when the latter entered there." Of the *Mānava* or 'Dravidian' kingdoms of the north, we are told, four were prominent, namely, the Aikṣākus at Ayodhya (Oudh), the Janakas at Videha (North Bihar), the Vaisālakas in the country north of Patna, and the Saryātas et Kusāsthali in Anārta (Gujarat), with three less prominent, the Karushas in the country round Rewā, a kingdom at Mahiehmatī on the Narbadā, and another at Payoshni, with perhaps an eighth, the Dharehṭakas in the Punjab, and possibly a ninth, Nabhaga's line on the Jumna. The Mānava or Dravidian stock, originally occupying the greatest part of India, steadily lost ground before the Ailas (Āryans). "Of the Mānava kingdoms that existed originally, three remained, that of Ayodhya, Videha, and Vaisālī, and all the Dekhan except the N. W. part remained unchanged, though it is said that the ruling families in Pāṇḍya, Cole, and Kerala were offshoots from the Turvasu branch of the Ailas."

The rest of North India and the north-west part of the Deccan had been dominated by the Aila stock and was held thus:—"The Yādavas (descendants of Yadu) held all the country between the Rājputana desert and a line drawn roughly from Bombay to S.E. Berar and then

north to the Jumna, excluding petty chieftainships in the hills and probably Matsya. The Anavas (descendants of Anu) held (1) all the Panjab (except the N. W. corner), comprising the kingdoms of Sindhu, Sauvira, Kaikeya, Medra, Vahlka, Sivi and Ambastha; and (2) all East Bihar; Bengal proper (except the north and east) and Orissa, comprising the kingdoms of Ainge, Vanga, Pundra, Suhma and Kalinga. The Druhyue (descendants of Druhyu) held the Gandhara kingdom and the N. W. Frontier and are said to have spread out beyond that and established kingdoms in the *mleccha* countries outside in early times. The Turvasu line (descendants of Turvasa) had disappeared, except that the Pandya, Cola and Kerala dynasties claimed descent from it." It is explained that "these results do not mean that the Aila stock constituted the bulk of the population, but that it had conquered those lands and was the dominant body in them. It supplied the Kshatriya class, which would have influenced the bulk of the people profoundly, so that the higher classes were no doubt largely leavened with Aila blood, though the lower grades would have remained racially the same; namely; the various groups of pre-existing folk. The broad result stands out clear that the Aila stock, which began in a small principality at Allahabad, dominated the whole of northern India and down to Vidarbha, with the exception of the three *Manava* ("Dravidian") kingdoms of Ayodhya,

Videha and Vaisālī; and these had been influenced by the Ailas. So it is said, the earth was dominated by the five races (*vams'a*) descended from Yayāti. This result agrees exactly with the Āryan occupation of India, so that what we call the Āryan race is what Indian tradition calls the Aila race, and so Aila=Āryan.¹²²

Although Pargiter's conclusions and identifications are not accepted in their entirety by most scholars, and some of his views such as the entry of the Āryans into India from the mid-Himalayan region and not by way of the north-west frontier, the ~~non~~-Āryan origin of the earliest Brāhmanas and of one or two of the royal dynasties named by him¹²³, the non-Āryan authorship of all the earliest hymns of the Rig Veda, the probable invasion by sea of the Anga, Vanga, Pandra, Suhma, and Kalinga countries by the ancestors of their present inhabitants, may be open to question,—his analysis of ancient Paurāṇic tradition would, on the whole, appear to be generally consistent, comprehensive, and in most respects probable.

From Paurāṇic data, Indologists further infer that the Brihadratha dynasty of Magadha, which was more or less contemporaneous with the Ikshāku dynasty of Ayodhya, became supreme

¹²² *Ancient Indian Historical Tradition*, (1922) pp. 292-5.

¹²³ The *Satapatha Brahmana* refers to *Asvamedha* sacrifices (symbolising the establishment of imperial suzerainty) performed by the Ikshāku king Purukutsa and the Panchala kings Kṛisya and Sona Satrasah besides some others.

in northern India about 1727 B. C. On the death of the emperor Sahadeva of that dynasty in the Mahābhārata War about 1424 B.C., his son Samadhi became king in Girivraja, the hill fortress at the foot of which grew up Rājagriha (modern Rajgir), the old capital of Magadha. The last sovereign of the dynasty, Ripunjaya by name, died about 727 B. C. The Ś'is'unāga dynasty founded by Ś'is'unnāga of Benares succeeded to the suzerainty, and its eighth emperor, Udyin by name, founded Pāṭaliputra (modern Patnā) in 485 B.C., and it was during his reign that Hindu soldiers fought under the Persian Xerxes against the Greeks in 480 B. C. Bimbisāra, the fifth sovereign of this dynasty, a contemporary of Buddha, conquered the Anga kingdom (Bhagalpur and Monghyr districts) about 500 B. C., and it was probably his son Ajātasātru who, in the first half of the fifth century, established his suzerainty over Kāshi (Benāras), Kos'ala (Oudh), and Videha (north Bihār). The ten Ś'is'unāga sovereigns are described in the Purāṇas as Kshatriyya. But the last of the line became, through marriage with a S'udra woman, the founder of a S'udra dynasty known in history as the Nanda dynasty (consisting of Mahāpadma Nanda and his eight sons), although they are direct descendants of Ś'is'unāga. The Nandas were supplanted by the Mauryas (326-188 B. C.) at Pāṭliputra.

It was only natural that in the course of this gradual expansion of the Āryans towards the east and the south, a certain amount of racial admixture

become unavoidable; and contact with pro-Āryan Dravidian culture could not have failed to modify their ancient Indo-Āryan culture, and in course of time produced a characteristic Indian or Hindu (Ārya) culture. One of the objects of the *Vratya stoma* ceremony prescribed in the Brāhmaṇa and Sūtra literatures appears to have been to admit into the Āryan fold persons who were not born Āryans.¹²⁴ In the next section we shall further see reasons to infer that a certain amount of foreign racial elements must have also entered into the Indian population in Post-Āryan times.

(9) *Post-Āryan Foreign Elements.*

From about the seventh century before Christ down to the earlier centuries of the Christian era, the Indian people came into close contact with various foreign peoples—Syrians, Bactrian Greeks, Scythian S'akas and Kushāṇ Hunas, Persians or rather Parthians,—who from time to time made incursions into India and, for longer or shorter periods, succeeded in holding parts of North-western India. Although these foreign invasions did not produce any lasting effects on Indian society, yet some foreign elements must in this way have entered into the composition of the Hindu population of those parts.

As intimate contact with foreign nations and partial intermixture with some of them must

¹²⁴ See N. Ghose's *Indo-Aryan Literature and Culture*. (Calcutta, 1934), pp. 6-11, and the references (*Pancha Vimsa Brahmana*, XVII, 1-17, and other works) mentioned therein.

have affected, in however small a degree, Indian culture including perhaps the development of caste, it may not be out of place to refer, in a little more detail, to the history of such racial and cultural contact in the past.

In the sixth century before Christ, in the reign of either Dars'aka or of Udaya' (Udayin) of the S'ais'unaga dynasty of Magadha, Darius, king of Persia, succeeded in including western Panjāb in his Persian Empire; and Hindu archers from India are said to have fought in the Persian army at the battle of Plataea in Greece in 479 B. C. There is evidence to show that maritime commerce between India and Babylon flourished in the seventh and sixth centuries before Christ, and perhaps commenced earlier. Between 327 and 325 B. C., Alexander the great of Macedon succeeded, after bloody massacres, in subjugating portions of North-Western India which, however, regained their independence in less than five years. After Alexander's death (323 B. C.) his former general Seleucus who, about 305 B. C., made himself king of Syria, invaded India with the object of reconquering the Panjāb. But Chandra Gupta Maurya who, as we have seen, had ascended the throne of Magadha by uprooting the Nanda dynasty, established a mighty empire extending from the banks of the Indus to the mouth of the Ganges, inflicted a crushing defeat on the Syrian army. During the reign of Chandra Gupta in the last quarter of the fourth century before Christ and of his son and successor, Bindusāra

in the first quarter the third century, B. C., the Maurya empire extended as far west as Herat and as far south as Madura, and the Emperors received at their Court at Pataliputra embassies from the Greek ruler of Egypt, the Emperor of China, and certain Central Asiatic powers. Although Bindusāra's son and successor As'oka (circa 264 to 227 B. C.) annexed Kalinga to his Empire, he lost the Tamil territories of Chera, Chola, Pandya and Satyaputra and the Andhra territory of Deccan. But in the north his dominion continued to include Nepal, Kashmir, the Swat valley, Afghanistan as far as the Hindukush, Sind, and Baluchistan. In about fifty years, during which seven Maurya kings followed, dissensions and foreign invasions put an end to the Maurya empire. Demetrius, son of the Greek king of Bactria, wrested the north-western territories of the Mauryas by about 190 B. C., and Mithridates I. of Parthia annexed Western Panjab to the Parthian Empire (which included Persia) by about 140 B. C. The Sunga (184-72 B. C.) and the Kanva (72-27 B. C.) dynasties that followed the Maurya ("Peacock") dynasty had intermittent fights with the Bactrian Greeks on the banks of the Indus, on the one hand, and with the Andhras of the Deccan, on the other. Under their king Kharavela, the Kalingas made more than one attack on Magadha and, though there is no definite evidence that the Kalingas actually succeeded in establishing their rule in Magadha, for once at least they appear to have overthrown the shattered fabric of the Magadhan empire.

From the second century before Christ, nomad Scythian or Saka hordes—probably of the Caucasian stock,—from Central Asia poured down on the river-valleys of Northern India, established themselves in the Panjāb and extended as far south-west as Saurashtra (modern Kathiawar) and as far west as Msthera.

In the first century after Christ fresh foreign hordes, called the Yuechi by the Chinese historians, poured in from Central Asia by way of Bactria and Kabul; and their principal clan, the Kushāns, succeeded in becoming masters of a large portion of north-western India and, by the first half of the second century, their most famous king Kanishka who had his capital at Purushapura (modern Peshawar), ruled over Kabul, Kashmir and the whole of Northern India as far east as Benāres and as far south as Sindh and the banks of the Narmadā. During the reign of Vasudeva who succeeded the powerful Huvishka (a son of Kanishka), the Kushān empire began to break up and there followed either a dark age of anarchy and confusion for over a century, as historians have so long thought, or, if the latest erudite attempt at reconstruction of the history of this period be accepted, a dynasty of the Arya-nised or, as we would now say, Hinduised Nagas of the Dravidian stock called the Bhāras'iva dynasty, who originated in Central India, broke up the Kushān empire, drove the Kushāns further and further to the north-west, till, by about 165 A.D., the last Kushān emperor Vasu-

deva ceased to rule and Nava Naga (circa 140-170 A.D.) the founder of the Bhāras'iva dynasty and his son and successor Vir-Sena (170-210 A.D.) re-established Hindu sovereignty in Āryāvarta and beyond. The empire of the Bhāras'ivas, we are told, comprised Bihār, the United Provinces, Malwa, Rajputāna and the Madra republics in Eastern Panjab.¹²⁵ According to Mr. K. P. Jayaswal's account, the Bhāras'iva dynasty was followed in 284 A. D. by an Āryan Brahman dynasty named the Vakataka dynasty which, it is said, maintained its suzerainty in North India till 348 A. D.

However that may be, by about the year 320 A. D., Chandra Gupta, who was from his mother's

¹²⁵ Mr. K. P. Jayaswal in his *History of India, c. 150 A.D. to 350 A.D.* has brought forward evidence in support of the existence of what he calls the "Naga-Vakataka Imperial Period" of Indian History (see *Journal of the Bihar and Orissa Research Society*, 1933, pp. 1-223). It may be pointed out that the word 'nagasa' on some Bhāras'iva coins is not a mis-spelling for 'nagasya' as Mr. Jayaswal seems inclined to think (*J. B. O. R. S.* 1933, p. 26), but it is a local form (either adjectival or corrupt) of the racial or tribal or clan name 'Naga'. The suffix '-sa' or '-s' is similarly added in those areas to some other clan names as, for example, 'gajasa' (for 'Gaja,' elephant). It is also significant that some Bhuiya families assume the clan-name of 'Bhujanga' (serpent) which is sometimes contracted into *Bhoja*. Some aboriginal tribes of the Central Provinces and Orissa, such as large sections of the pre-Dravidian Bhuiya tribe, claim to belong to the *Nagasa* or *Naga* clan or *gotra*, although it does not appear to be a genuine totemic clan-name of the Bhuiyas, but is obviously only a class-name presumably adopted by them to enhance their dignity by suggesting a relationship with the ancient Naga Dravidian ruling dynasties of their country. (See the present writer's monograph on *The Hill Bhuiyas of Orissa*, pp. 146, 305, 306).

side, of low S'udra descent, and originally held a fief on the borderland between Magadha and Kaus'āmbi, captured Pataliputra with the help of the Lichchhavis of Vais'ali, and then gradually extended his dominions along the valley of the Ganges up to Allahabad and established the Imperial Gupta dynasty. In doing so, Chandra Gupta, according to Jayaswal, defied the over-lordship of the Vakataka emperor Pravara Sena.

Samudrā Gupta, the son and successor of the founder of the dynasty, extended his rule from the Himalayan slopes on the north to the Narmada on the South, and from the Sutlej and the Chambal on the West to the Hooghly on the east, and controlled the hill tribes of the Himalayas and the Vindhya as well as the Hindu clans of Rajputāna. His successor Chandra Gupta Vikramaditya (375-413 A.D.) who seems to have removed his capital to Ayodhya, annexed Malwa and Ujjain to his empire and dispossessed the S'aka rulers (*Kshatrapas*) of Saurāshtra. His reign was the golden age of Indian History when literature, art and science were cultivated with success and distinction.

Towards the end of the reign of his successor Kumara Gupta (413-455 A.D.), a fresh horde of of Central Asia barbarians,—the White Huns or Epathalites,—came down upon India. The Gupta empire broke up by about 478 A.D. during the reign of Kumāragupta's successor Skandagupta (455-480), and Northern India passed under the White Huns who destroyed the centres of Hindu

culture in the valleys of the Kabul and the Swat, over-ran the Panjab and Rajputana, occupied Gwalior, conquered Malwa, and by about 500 A.D. established their capital at Sakala (modern Sialkot) in the Panjab. Although their eastward progress was checked by the Maukharī chief Ishanavarman, and a coalition of Hindu princes under the lead of Yasodharman, Raja of Malwa, succeeded in putting an end to Hunnish power by defeating the Huna tyrant Mihirgula in about 530 A. D.,—yet during the sixth century various tribes of Hunas settled in large numbers in the Panjab, Rajputana and Kas'hmir. The Gujars of our days are believed to be connected with the Hunas, and the Parihar clan of Rajputs is by some believed to be of Gujar origin, and one of the sub-castes of the Gujars is still named 'Hun.' The Haihaiya Rajputs who ruled over the Central Indian kingdom of Chedi in the eleventh century and who are said to be now represented by the Haynbans Rajputs are by some scholars believed to have been of Huna descent.

Thus the sixth century of the Christian era was, so far as our present knowledge goes, a period of darkness and confusion in North Indian History; and northern India knew no paramount power until the beginning of the seventh century.

Towards the end of the sixth century, Prabhakara Vardhana, the last king of Thaneshwar, who was related through his mother with the Imperial Guptas, defeated the Hunas and some Rajput princes of his neighbourhood and attempted to consolidate the whole of northern India under one sovereign. He subjugated the Hunas, the Gurjaras, and the Malavas, but died in 604

A.D., and his eldest son Rajyavardhana after a brief rule of two years met his death in 606 A.D., at the hands of S'as'anka, the king of Gaur (north Bengal). But Rajyabardhana's brother Harshabardhana, who succeeded him at Thaneshwar, revived the old glories of the Gupta empire. Between 606 and 612 A.D. he made himself master of northern India, fixed his capital at Kanouj and established his paramountcy from Saurashtra and Gujrat in the west to Bengal and Assam in the east, and from the Himalayas on the north to the Vindhya and the Satpuras in the South. The powerful Chalukya king, Pulakesin II of Vatapi or Badami, checked his further advance south of the Narmada.

On the death of Harsha in about 647 A.D., Northern India was again plunged into anarchy and confusion, out of which emerged a number of petty States under Chiefs who claimed to belong to various Rajput clans and to be true representatives of the ancient Kshatriyas. These States of Northern India enjoyed respite from foreign invasion till, by the close of the 10th century, Muhammadan Turki invaders appeared through the north-western passes and, in the absence of any powerful kingdom or any strong federation of States to oppose the invaders, India gradually passed under foreign domination. Even the episode of the Arab occupation of Sind and the Lower Panjab from the eighth to the tenth century could not have failed to affect, however slightly, the racial composition of the Indian population of those parts.

In connection with foreign elements in the Indian population and culture a passing reference

might also be made to the colonial and commercial contact in the past of Indians with foreign peoples. Sir Anrel Stein's explorations in Khotan and some neighbouring parts of Central Asia reveal the past existence of India's contact with and colonisation of those parts. As early as in the second century before Christ, there existed an Indian colony on the Upper Euphrates in Armenia where ruins of Hindu temples and images of Hindu deities have been discovered. Earlier still, from about the eighth century, B.C., if not from a more antecedent date, India maintained trade relations, both by land and sea, with Arabia, Babylonia, Egypt and Phœnicia to the north-west and west and China to the north-east. The missionary activities of Buddhism extended as far north as Mongolia and Siberia, as far south as to Ceylon, east to Burma, China, and Japan, and west to the Mediterranean basin. Probably before the third century before Christ, Ceylon was colonised by Indians. In about the first century B.C., Java and Cambodia were colonised, and either in the first or the second century A. D., if not earlier, a Hindu kingdom was established in South Annam. Bali, Borneo, Sumatra and the Malay Peninsula were also colonised by Indian adventurers in the early centuries of the Christian era. And there would thus appear to have been frequent intercommunication between India and those countries, and in this way not only did India impose its culture on some peoples of Further Asia but also perhaps imbibed some cultural and possibly racial elements from them. One of the coins of the Andhra dynasty (circa 200 B.C. to 250 A.D.) has a device of a two-masted ship testifying to the wide maritime anti-

vities of the Dravidians. Such slight Indonesian, Polynesian and Melanesian elements, racial or cultural or both, as may have come to Southern India must, in all probability, have come by sea.

Among other foreign elements in the Indian population, leaving out the Parsis who are the nearest kinsmen of the Indian Aryans and, as such, can hardly be called foreign, and such Muhammadan population as the Caucasian Afghans, the Semitic Arab traders of the West Coast, the Moghuls far down the Ganges and the West Coast, the true Pathans of the North-Western Frontier and the United Provinces, there are now about a *lakh* and one-third Baloch, about thirty thousand Mongoloid Bhotias, nearly two and a quarter *laks* of Brahmins, about eighteen thousand Semitic Jews (White and Black), a little over twenty-three thousand Makranis, about one *lakh* and ninety-thousand Mapillas, and nearly three and three-quarter *laks* of Nepalis besides such minor foreign communities as the 'Feringhees' (Goanese, East Indian, etc), Gypsies, and Habshis (descendants of African Negroes and Abyssinians, in Western India). Unlike the Sakas and the Huzas and some other ancient foreign immigrants who were racially absorbed in the Indian population, these later foreign elements, with hardly any exception, have remained distinct entities, both racially and culturally.

Such, in brief, is a rough view of the probable racial history of India with the outlines of her political history for a background.

ANTHROPOLOGICAL NOTES AND NEWS.

Scientific Congresses :—The first session of the International Congress of Anthropological and Ethnological Sciences (*Congres International des sciences Anthropologiques et Ethnologiques*) was held in London from the 30th July to 4th August last under the patronage of H. R. H. the Duke of York. Owing to the illness of the Duke of York, His Royal Highness Prince George opened the Congress. Delegates were sent from 42 countries, India being among them. The Earl of Onslow was elected President. The sections included : A (a) Anatomy and Physical Anthropology; (b) Anthropometry; B Psychology; C Demography and Population Problems; D (a) Ethnography (General); D (b) Ethnography (African); D (c) Ethnography (American); E Technology (Arts and Crafts); F Sociology; G Religions; H Language and Writing. A sub-section on Indian Ethnography was also formed. The Presidents of the respective sections were : A. —(a) Prof. Sir Grafton Elliot Smith; A (b) Prof. H. J. Fleure B. — Prof. F. C. Bartlett; C. — Prof. C. B. Fawcett; D (a). — Dr. A. C. Haddon; D (b). — Rev. E. W. Smith; D (c). — Mr. T. A. Joyce; E. — Dr. Henry Balfour; F. — Prof. C. G. Seligman; G. — Rev. E. O. James; H. — Dr. Alan. H. Gardner. Special arrangements had been made for the exhibition of ethnographical and archaeological collections, notable among them being materials collected from El Khargesh by Miss G. Caton-Thompson and

Miss E. W. Gardner; the famous Maudslayi Maya plaster casts and collections from British Honduras; and the prehistoric potteries collected by Sir Aurel Stein from Persia and Beluchistan.

It has been announced that the next Congress will take place at Copenhagen in 1938, and Prof. T. Thomsen of Copenhagen has been elected the general President. A summary of the proceedings of all the sections was given in 'MAN' for September, 1934.

Under the auspices of the Portuguese Society of Anthropology and Ethnology, a National Congress of Colonial Anthropology was held at Oporto from October 7 to October 11 on the occasion of the Colonial Exhibition (with an Ethno-anthropological section). The General President of the Congress will be Prof. A. A. Mendes-Correa. The Congress was divided into 3 sections: 1st, Physical Anthropology and Racial Biology (President: Prof. Pires de Lima); 2nd, Ethnography and Sociology (President: Dr. Alves de Cunha); 3rd, Prehistory and Human Geography (President: Count Penha Garcia). The principal subjects discussed there were the following:—

Classification of Races of Guinea, Angola and Mozambique. Anthropology of soft parts in Colonies. Social value of Native Races. Heredity in Race-Mixture. Psychology of Metis, Factors of criminality in the Colonies. Impor-

tant African Migrations. Bushmen in Angola. Anthropology of Timor and Wallacs line. Anthropological Training of Administrators and Colonial officials. Ethnographic Questionnaires in the Colonies. Necessity of Archaeological Research.

THE CONGRESS OF AMERICANISTS took place at Seville immediately after the First International Congress of Anthropological and Ethnological Sciences.

THE SECOND INTERNATIONAL CONGRESS OF SLAVISTS took place in September at Warsaw. The section which dealt with "Social Sciences and History of Civilizations" was presided over by Prof. Czekanowski of the University of Lwow. The following subjects were discussed there: Racial composition of the Slav countries, Anthropology of the Jews of those countries; Characteristics of ancient Slavs, etc...

THE ELEVENTH CONGRES PREHISTORIQUE DE FRANCE was held at Périgues (France) from September 16 to Sept. 22, 1934, under the Presidentship of Dr. Felix Regnault in which the following subjects were discussed: Palaeolithic Period of the place where the Congress was assembled; the mesolithic and Neolithic industries of Dordogne.

Expeditions :—

Australia.—Under the joint auspices of the Museum of South Australia and the Board for Anthropological Research at the University of Adelaide, an expedition had been sent out to the region of Ernabella, eastern extremity of Mount Musgraves, with view a

to investigating the customs not only of that region but even up to the mountain chain, Mann. The members of this expedition were Profs. J. B. Cleland, T. Harvey Johnston, C. S. Hicks, Drs. Cecil Hackett, H. Gray, and H. K. Frey, Messrs. N. B. Tindale, J. O'conor, and H. M. Hale. The activities of by this expedition were as follows :—

Somatological measurements, including finger imprints, were taken on 100 Australians, the number of measurements taken of each individuals amounting to 53. Blood Groups were studied on 60 subjects giving us the result : 40 A. and 20 B.

The special feature of this expedition lay in the fact that, besides photographs (face and profile view), cinematographic films illustrating the ceremonies and phonographic records were also taken. Investigations were also carried on regarding physiology, chiefly their responses to temperature. As for the results of the linguistic researches carried on by the University, the following may be noted :—

(1) A Dictionary of Aranda Language (Central Australia) by C. Chewings, N. B. Tindale, and J. A. Fitzherbart, with a study on the Grammar by T. G. H. Strehlow. (2) Texts and Grammatical Analysis of Worora (North-Western Australia) by J. R. B. Love. (3) Songs and Texts of Tangane and other nearly extinct Coastal Languages of South Australia by Prof. Davies and Mr. Tindale.

Africa :—

Under the leadership of Dr. R. Elber, an Austrian Expedition reached Sierra Leone in the early

part of this year. From there it is expected to proceed to Liberia with the object of exploring the interior of the country as well as for studying the little known tribes of that region. Religion and the Magical rites of the natives as well as their practically unknown languages would be the subject of investigation this time.

Two expeditions were sent to Fezzan under the auspices of Reale Società Geografica Italiana (The Royal Geographical Society of Italy). In the first, which was carried on in 1932 under the direction of Prof. Lidio Cipriani of Firenze (Florence) who was in charge of the Anthropology section and Dr. Antonio Mordini who was in charge of the Ethnographical Section, the investigations were mainly confined to the Tuaregs and the Tibous [*cf* R. Biasntli—I Tebu secondo recenti indagini Italiane. Archivio per l'Antropologia e la Etnologia. (Florence). vol. 63 Fasc. 1/2; L. Cipriani.—Relazione Preliminare delle ricerche eseguite nel Fezzan dalla missione R. Società Geografica Italiana-Boll del. R. Società Geografica Italiana. Serie VI. vol. X. Ginevra. 1933. XI. pp. 398-410.]. Although the activities of the expedition were hampered to a great extent by the constant hostilities of the natives, Prof. Cipriani had been able to take measurements of 74 Tuaregs as well as plaster casts of the face of 18 men and 4 women. The Ethnography of these peoples were carefully studied. In addition to these, the two investigators were also able to collect ample data about the somatic characters, demography, psychology and the problem of race-mixture of the Berbere or Arabic populations of Lybia. In the second, which was carried on from October 1933

to January 1934, by Profs. S. Sergi and Pace and Dr. Caputo, the main work undertaken by them was the investigation of the necropolis left in Fezzan by the Pre-Arabic populations, one of which might be Pre-Roman and the other contemporaneous with the Roman Empire. These had been, however, identified as Garamantes. Prof. Sergi is of opinion that the crania and skeletons found there are distinctly Mediterranean in their characteristics and bear close resemblance to the Tuaregs. His conclusions have lent fresh support to the theory propounded 20 years ago by Bertholon and Chantre about the ancient population of Algeria and Tunisia. It appears then that the present day nomads of Sahara may be the descendants of, or at least groups nearly related to, the pastoral and agricultural Mediterraneans who lived in that region nearly 2000 years ago.

It is reported in the *AMERICAN ANTHROPOLOGIST*, 36, 143, that Dr. Martin Gusinde and Father Schebesta will conduct field work among the Ituri Pygmies. It is expected that Dr. Gusinde will work on the somatological side, while linguistics will be studied by Father Schebesta.

Europe:—The Anthropological Laboratory of Vienna has recently sent an expedition to Banat to study the anthropology of a district of German Colonists. 1000 subjects are expected to be examined for the study of family characters and transmission.

India:—A young Indian scholar, Mr. J. K. Bose, a Research Fellow of the American Museum of Natural History, is reported to be carrying on ethnographical research among the Marrings and 'Old'

Kukia of Assam under the direction of Prof. Clark Wiesler of the Museum and Dr. P. Mitra of the Calcutta University.

It has been announced in *NATURE* of August 4, 1934, that an expedition to be called the *Gaekwar of Baroda Greater India Research Expedition* (named after its principal donor, H. H. the Gaekwar of Baroda) will carry on exploration work in Lower Burma and Siam. Dr. Quaritch Wales, well-known for his researches in Siam, will be its leader. It will be organized by a small Committee of the Royal Asiatic Society, the the Indian Society, and the School of Oriental studies, with Sir Francis Younghusband as its Chairman. It is to be hoped that this expedition will throw considerable light on artistic and religious development in Further India and Siam, and the cultural affinities between these countries and India as regards art and religion.

In a brief communication to "*NATURE*" of July, 21, 1934, Mr. G. E. Hutchinson of the Osborn Zoological Laboratory, Yale University, has described the main results of the Yale North India Expedition (1932-1933). Of these only a few that have direct bearing on Prehistoric Archaeology and Human Palaeontology are mentioned below. Amongst a very large number of primates which Mr. G. E. Lewis, palaeontologist to the Expedition, collected in the Salt Range and Simla Hill States, one that will easily attract the attention of anthropologists is *Rama-*

pithecus brevirostris, Lewis, a preliminary report of which has recently appeared in the *American Journal of Science*, 27, 161: 134. The bony fragments that had been unearthed here and upon which this species was christened consisted of a right maxilla and a pre-maxilla. The anatomical peculiarities of these finds may be described as follows:—"parabolic dental arcade, small canine alveolus, absence of diastemata, small incisors, high palate, and slight prognathism." Its importance lies in the fact that it approaches "more closely to Hominidae than any previously discovered Tertiary apes." Besides these, the discovery of several stone implements, "though few and fragmentary" in the Pleistocene deposits of this region leads us to expect with the author that "very primitive hominids may one day be found in this region."

ANTHROPOLOGY IN THE UNIVERSITY OF KHARKHOV. (U. S. S. R.). In an article in the "REVUE ANTHROPOLOGIQUE," (Avril-Juin, 1934, nos. 4-6) Prof. Léon Nicolaëff, of the University of Kharkhov, has placed before us the report of the researches that had been carried on for the last ten years and are still being carried on in the University by himself and his associates, notable among them being M^{me}. O. Nedrigayloff, and M^{me} Tohou-toukalo. During the last ten years, the investigations were mainly conducted on the following lines, and it is gratifying to note that special attention has always been given to the practical application of anthropology. Researches were at

first commenced by Prof. Ivanovsky and afterwards continued by Prof. Nicolaëff, firstly, on the modification of morphological characters of the population of Ukraine due to the effect of prolonged famine; secondly, on the physical characters of the population of Ukraine with a special attention to the sex, age, nationality, social condition as well as the profession of the individual examined; thirdly, on the influence of social milieu on the morphological characteristics and chiefly on the rôle of social selection on differences in the physical characters of individuals belonging to different social groups; fourthly, on the heredity of a great number of somatoscopical and somatometrical characters; fifthly, on the importance of the change of physical type among the population of Ukraine as a result of the ethnic crossing in course of the last century; sixthly, on the anthropological study of the characters of heroes from the principal Russian novels such as the novels of Dostoievsky and Tolstoy by Prof. Nicolaëff, on Turguenëff by M^{me} Rodd, Gorki by M^{lle} Fercht; and, lastly, on the problems that are vitally connected with medical and industrial profession, for example,—(a) to trace the contour of the vertebral column by means of an apparatus newly devised by Prof. Nicolaëff with a view to ascertaining its curvature, its degree of deformations due to pathological conditions as well as to study the development of *cubitus valgus*, *genu varum*, *genu valgum*, *hallux valgus*, etc.; (b) to collect data that are highly necessary

for the standardisation of boots, dresses, and benches, etc. Besides these, important investigations have also been carried on by these workers on problems such as—the change of the proportions of body of the Ukrainian school boys as well as of infants of ages from 1 day to 1 year; the influence of puberty on the growth; the development of hairy system among boys and the mammary gland among girls; the frequency of the morphological types of Sigaud and the asthenic type of Stiller; the development of subcutaneous adipose tissue (determined by means of Oeder's method); the determination of the robustness of individuals of different ages by means of Pignet's index; the time of setting in of menstruation; the influence of geographical milieu on the morphological characters as well as on the function of endocrinal glands of men.

In "Anthropologischer Anzeiger," vol. 10, no. 4 is published a report of Mr. F. Berckheimer concerning the discovery of a cranium on the 24th July, 1933 at Steinheim on Murr in Württemberg. No skeletal remains other than a skull which was again without the mandible had been unearthed there; and even the skull was found in a very corroded state. The skull was not free from injury since the major part of the orbit and the left temporal as well as the anterior surface of maxillae were badly damaged. The faunal remains that were found associated with the skull were represented by two molars, one belonging to *Elephas antiquus* and the other to *Rhinoceros*

merckii. It will be very difficult at present to ascertain its geological age, since if the animal remains are coeval with the skull, the age of the skull may be determined to be pre-Mousterian or Neanderthal, while, on the contrary, it possesses characters, as judged from a photograph accompanying the article of Mr. Berckhsmer, that are closely identical with a Neanderthal cranium. The vault is sloogated; the orbits are large, prominent, even more prominent than those of the typical Neanderthal, crania. The nose is broad and the mastoid process is much reduced. The frontal profile angle is 66° while that of La Chapelle and Saiots 65° ; the Cranial Index is 70 but the length of the cranium is relatively small, being nearly 182 mm. On the contrary, there are other characters, e. g., the absence of occipital ridges, the reduction of the last molar, in which not only does it differ from Neanderthals but resembles to a great extent the modern man. Moreover, the horizontal profile of the face is identical with that of modern man. As to its place in human ancestry, Mr. Berckhsmer is of opinion that the Steinheim cranium represents a very primitive stem, quite different from Neanderthals but more man-like than all the fossil crania hitherto known. But no definite conclusion can be formed in regard to this question until we have a detailed examination of this skull. The variations that have been noted in it from the typical Neanderthal cranium may, however, be explained with Prof. H. V. Vallois as due to individual variation which is so often found in every zoological species. (Compare in this connection the

skulls discovered at La Chapelle-aux-Saints, Gibraltar and Rome).

It is reported in the "AMERICAN ANTHROPOLOGIST" (April-June, 1934) that a committee has been appointed under the auspices of the Division of Anthropology and Psychology, National Research Council, to prepare a *Handbook the the South American Indians* which will be a sequel to the *Handbook of American Indians North of Mexico*. The members of this Committee are Poffenberger (Chairman), Sapir, Spier, Swanton, Wissler, Bennett, Dixon. Herskovits, Kidder, Kroeber, Lothrop, Olson, Petruccio, Speak, and Stirling.

It has been announced that the friends, colleagues, and students of Prof. Eugen Fischer, the distinguished anthropologist of Berlin, are offering to him in commemoration of the 60th anniversary of his birth-day a "Festband" which will consist of a large number of valuable studies in anthropology, anatomy and chiefly in human heredity in which subject he is a leading authority. All these essays will appear in "Zeitschrift für Morphologie und Anthropologie," Band XXXIV. of which Prof. Aichel and Dr. von Verschuer will be the editors. On our part, we fully associate ourselves with his numerous friends and colleagues in offering our heartiest felicitations to this distinguished anthropologist on his sixtieth birth-day.

The first session of the "COMITE DE STANDARDISATION ANTHROPOLOGIQUE SYNTHETIQUE" was held at

Bologna (Italy) from the 26th to the 31st March, 1934, with Prof Fabio Frassetto, the celebrated Italian anthropologist, as its president. The following are members of the Committee: Prof. V. Bounak (Moscow); Dr. C. Davenport (New-York); Prof. Eugen Fischer (Berlin); Prof. F. Frassetto (Bologna); Prof. K. Hilden (Helsingfors), Prof. A. A. Mendes-Correa (Oporto), Prof. G. Montandon (Paris) Prof. J. Weninger (Vienna) and Dr. Morris Steggerda (Long Island). All communications and resolutions have been published in the Bulletin of S. A. S. (its annual subscription is Lire 15.), the first number of which has very recently been published. The following classification has been adopted for future work:

1. Anthropometrical Methodology.

1. Enumeration of Measurements. 2. Anthropometrical Landmarks. 3. Instruments. 4. Technio of application.

2. Morphological Methodology.

- a. Anthroposcopical: Description. Instruments.
- b. Morphology *sensu stricto*: Anatomical. Histological (normal and comparative pathological)

3. Anthro-po-biological Methodology.

1. Genealogy and Family. 2. Physiology.
3. Psychology. 4. Pathology. 5. Heredity. a) Twins b) Bastards.

4. Methodology of Nomenclature:

1. on skeleton. 2. on the living.

5. Statistical and biometrical methods.

Instances of twins have been recorded among lemurs, gibbons, baboons, and monkeys, but no such cases have hitherto been observed among the chimpanzee, orang, and gorilla. In a communication to "SCIENCE", May 11, 1934, Dr. Robert M. Yerkes has related an instance of twins, one male and the other female, born of Chimpanzee parents, at the Anthropoid Experiment Station of Yale University, at Orange Park, Florida, the age of the male being about eleven years and the female about twenty.

In "THE ILLUSTRATED LONDON NEWS," August 18, 1934, Dr. P. V. van Stein Callenfels, a noted Dutch prehistorian, has communicated an interesting article on the "Implements used by SoloMan." *Homo Soloensis*, as it is otherwise called, is considered by some anthropologists as a variety of Neanderthals, but in the opinion of Sir Arthur Keith, himself a prominent authority on this branch of study, this estimate of its antiquity is "too moderate." Sir Arthur believes it to be "an improved and advanced and much later form of *Pithecanthropus*". The implements which were discovered by two scientists, Dr. C. ter Haar and Dr. Von Koenigswald from the same bed as the Solo Man were represented by several palaeolithic, most of them being scrapers quite different from those of Western Europe. These implements were made of chalcedony instead of flint. That the makers of these implements had some "rudimentary sense of beauty" is attested by the fact that the implements found here

were sometimes semi-translucent and of yellowish brown-colour. The scrapers are mostly small, retouched carefully at the edges although there are many instances where roughly chipped scrapers resembling the Pre-Chellean rostrocarinates of Europe have been recorded. Some of these have distinctly Mousterian facies since one of their sides was thoroughly chipped while in the other, the presence of the bulb of percussion was noted. One noteworthy fact of this discovery is that in addition to these stone implements, a well-developed bone industry sometimes made from antlers of Pleistocene deer (*Axis Leydekkeri*) was recovered. Among the bone implements, harpoon, spatula, and hammer or hoes deserve to be mentioned. The hoes were presumably used for digging up roots and tubers. Spatula, a type of implements "still used by the Eskimos for scraping hides," are found in almost all the prehistoric layers of Netherland Indies from the Pleistocene down to the beginning of the Christian era. Besides these, the presence of spines of a ray's tail which probably served as harpoons or arrow-heads for these peoples exactly as they are used by the present day Papuans, clearly indicates that "there was trade between these men of Solo terraces and some coastal folk". This at once tends to suggest that the authors of these industries were far more civilised than their contemporaries in Europe at that time. Hence the unique importance of this discovery.

Lecture.—

The Huxley Memorial Lecture for this year was delivered by Sir Annel Stein, the subject being "The Iudo-Iranian Borderlands, their pre-history in the light of Geography and of recent explorations." The lecture will be published, as usual, in the Journal of the Royal Anthropological Institute.

Obituary :—

We regret to announce the death of the following anthropologists :

1. Professor Davidson Black, Honorary Director of Cenozoic Research Laboratory of the Geological Survey of China, well-known for his epoch-making works on *Sinanthropus Pekinensis*; on March 16, 1934 at Peiping, China.
2. Dr. Georges Papillaut, Professor of Sociology in the Ecole d' Anthropologie of Paris, and a celebrated French anthropologist, in the middle of March last at Paris.
3. Dr. Henri Alexandre Junod, a well-known authority on South-African Ethnography, and author of (1) Chants et les contes des Baronga (1897); (2) Les Baronga (1898); (3) Life of a South African Tribe (1927), on April 22, 1934, at the age of 71 at Geneva.

J. K. GAN.

INDIAN ETHNOLOGY IN CURRENT PERIODICAL LITERATURE.

In *Man* for April, 1934, Major D. H. Gordon contributes *Notes on Early Frontier Terra-Cottas* (human and animal figurines, amulets, etc.) in which the author describes certain terra-cotta objects which he obtained recently at Sari Dheri in the Chardadad sub-division of the Peshawar District. The same number also gives the summary of a communication by Mr. H. Lee Shuttleworth on the *People of the Panjab Himalaya*.

In *Man* for May, 1934, Mr. James Hornell contributes a note on *Primitive Water-transport in India and the Adjacent Countries* in which he refers particularly to the coracle, inflated skins and various other skin-covered water-transport.

In *Man* for August, 1934, Mr. K. de B. Codrington comments on the generalisations made in the *Census Report of India, 1931*, regarding the racial elements in the Indian population, and suggests that "Anthropology, if it is ever to be taken seriously, must be approached biologically rather than linguistically," and that "the tendency should be towards localization, for, in the study of man, localization means precision."

In *Man* for September, 1934, Prof. J. L. Myres gives a concise account of the proceedings of the First session of the International Congress of Anthropological and Ethnological sciences held in London from the 30th July to the 4th August last. Summaries of the Presidential Add-

ress delivered by the general President (the Right Hon'ble the Earl of Ouslow) on *Anthropology and Administration*; the Huxley Memorial Lecture of the Royal Anthropological Institute delivered at the Congress by Sir Aurel Stein (*The Indo-Iranian Borderlands: Their Prehistory in the light of Geography and Recent Explorations*), the Address on *Aspects of the Census of India, 1931*, delivered by Prof. T. C. Hodson of Cambridge, the Address on *The Growth and Tendency of Anthropological and Ethnological Studies*, delivered by Dr. R. R. Marett of Oxford, and the Address delivered by Prof. J. S. Haldane of London on *Anthropology and Human Biology*, are also given, as also a summary of the Proceedings of the various sections of the Congress.

In *Man* for October, 1934, Prof. J. L. Myres, contributes the following review of the **Special Number of Man in India** published in commemoration of the First Session of the International Congress of Anthropological and Ethnological Sciences:—

"It is a graceful compliment, and will be widely appreciated by the learned Editor's colleagues everywhere, to celebrate the new International Congress by the publication of a Special Number of *Man in India*, with an announcement of the Congress itself on the cover. And the contents are worthy of the occasion, being an instalment of the Editor's own matured views on the central problem of *Caste, Race and Religion in India*.

"A previous article had set aside the orthodox Hindu theory of the divine or natural origin of the

Varna divisions of the population, and envenomed the theories of Nesfield, Ibbetson, Risley, Senart, Slater, Ketkar and Gait, and the syncretist interpretation of Hutton, combining his own suggestion of a local origin for the occupational taboo, with elements derived from his predecessors. Roy now proceeds to criticize these theories, briefly but acutely (pp. 75 ff), devoting, naturally, especial attention to the views of Dr. J. H. Hutton which credit the Aryan immigrants with merely describing 'in terms of an intensive Indo-Aryan society a social system really based on pre-existing conditions.'

"Like all pre-Aryan theories of caste-origins, Hutton has laid special stress on pre-Dravidian taboo on food and marriage, based on a fear of the evil *mana* of strangers. So this conception of *mana* itself has to be considered as a previous question (p. 105-7). Such 'Pre-Dravidian' notions however, had not (apparently) developed caste-divisions elsewhere, and further search must be made. Among the Mongloid tribes, notions similar to the *mana* of Oceania occur (p. 112), and again among Indonesians and Melanesians; but without caste-institutions (p. 115-9). In Polynesia there is *mana* in typical manifestation, and there are also social classes; but the classes of the Polynesians are not the same as the 'castes' of India (p. 128); and Hindu belief in a 'transmissible psychio power in man' is (Roy contends) quite different from Polynesian *mana* (p. 131). For *mana* among Dravidians, direct evidence is of course lacking for pre-Aryan times, but though survivals indicate that there was such a notion,

it seems to be unconnected with social distinctions such as caste. And the same holds of 'Indian Alpine' peoples (p. 155). The Buddhist *iddhi*, and Moham-medan *baraka*; Roy examines with the same negative result (p. 167) and finally the Jewish notions which have been in part transmitted into the Christian conception of personal 'holiness.'

"With the Zoroastrian ideas of personal purity he comes to something more nearly akin to the principle underlying caste-divisions (p. 173-8), and thus Roy brings us round to the Vedic Aryan's conception of a "myaterions supernatural power" of the same nature as *mana*, expressed (according to some), by the word *brahma*, which Pargiter had long ago considered to express something akin to *mana*, and also to be that quality in virtue of which the Brahman caste claimed, or were accorded, their superior position. If, as Harg and others suppose, *brahma* is connected with the root *brih* 'to grow,' 'to be strong,' this analogy certainly deserves close attention, especially in connexion with the Hindu philosophic notion of *gunas* or fundamental qualities, which further determine the *varna* or social class, determined by 'description' as the word itself implies (*varni*, 'to describe'). There would therefore not seem to be reason for looking beyond the Aryan outlook on the world and mankind for the *mana*-like principle which Hutton's explanation of caste presupposes. As Roy modestly says in conclusion, 'with regard to matters involving Indian social psychology, perhaps the Indian student, who has the advantage of studying the question from inside, possesses better opportuni-

ties of probing the inner consciousness of his own Indian society, and, perchance, of approaching a little closer to a right solution of the origins of caste."

In *Man* for November, 1934, Mr. A. Aiyappan contributes a note on *Prehistoric hand-made Pottery*. From a comparison of a hand-made earthenware ladle found underneath a pottery sarcophagus in one of the Gajjalkonda cairns in the Kurnool District with a gourd-shell ladle used by the Savaras of the Vizagapatam hills, the author infers "the strong possibility of the pottery ladle having been fabricated on the model of some [such] gourd original."

In *Folk-Lore* for June 1934, Mr. A. Aiyappan contributes a note on *Makkam—The story of the 'canonization' of a Nayar Woman*.

In the *Journal of the Bihar and Orissa Research Society* for March, 1934, Prof. Kalipada Mitra contributes a paper *On the conventional Methods of punishment and Disgrace in Folklore* (Indian), such as "riding the ass" with many insignia of shame (e.g. with the delinquent's face to the ass's tail, holding the tail of the ass in hand in place of bridle, and so to be paraded round the city).

In the *Quarterly Journal of the Mythic Society* for April, 1934, Mr. S. C. Mitra contributes *Notes on Popular Religion in Bihar*, comprising the cult of minor deities and spirits represented by rough or unhewn stones, Buddhist *Lats* or stone-pillars, and deified natural phenomena.

In the *Journal of the Anthropological Society of Bombay* for 1933, (published in 1934), Mr. B. H. Mehta contributes an article on "Religious Thought and Worship among the Chodhras of Gujerat," and Mr. Fram J. Daver, a 'globe cyclist' contributes *A story of Shrunken Heads Among the Jwaro Indians*.

In the *Indian Historical Quarterly* for September, 1934, Prof. Jean Przyluski contributes an article on *The Great Goddess in India and Iran*, in which the author shows that the ancient religions of India, Iran and Europe have a common myth of the Great Goddess, the divinity of Fecundity and of the Waters (the origin of all life and prosperity). He concludes,—“Kali, the divinity of the Sabaras, Polindas and other wild tribes, has an aspect not unlike that of Aditi-Anahita. Even before Vedic times, the Aryans were found in contact with populations who adored a great Mother and this contact, prolonged up to the modern era, explains the persistence of the same beliefs throughout the course of centuries.”

In the *Journal of the Bombay University*, for May, 1934, Mr. A. D. Pusalker, contributes a *Critical Study of the Works of Bhasa* with special reference to the sociological conditions of his age, as revealed in those works.

The Advancement of Science, 1934, contains the Presidential Addresses delivered at the Annual Meeting of the British Association for the Advancement of Science, held in Aberdeen on September 5-12, 1934. The subject of the Address of

Capt. T. A. Joyce, President of the Anthropological section, was *The use and Origin of Yerba Mate*. Another Presidential Address of special interest to anthropologists was that on *Psychology and Social Problems* delivered by Dr. Shepherd Dawson, President of the Psychology section.

In the *Journal of the Andhra Historical Research Society* for October 1933 and January, 1934, Mr. P. Seetaramiah gives a "*History of the Gavaras*." In this interesting article an attempt is made to show from such scanty historical data as may be available, that the agricultural caste of the Gavaras and the trading castes of the Komatis, now mainly inhabiting the Vizagapatam District in the Madras Presidency, came thither at about the same time from two different but adjacent parts of North-Eastern India (*Gauṛa* and *Kāmarupa*), and "settled and merged together, and eventually formed into a big group."

In the *Annals of the Bhandarkar Oriental Research Institute*, vol. XV (1933-34), Prof. H. K. Kapadia contributes an article on the "Ethno-Religious Classifications of Mankind as embodied in the Jaina Canon."

In *The Budha-Prabha* for October, 1934, Dewan Bahadur N. D. Mehta, contributes a short paper headed "*How Modern Hinduism is moulded by Buddhism*."

In *Indian Culture* for July, 1934, Dr. C. L. Fábri, discusses the *Latest Attempts to Read the*

Indus Script, and suggests that the seal-impressions were a fore-runner of the punch-marked coins, though not a regular currency such as cannot be expected in such remote times. Dr. Prannath's painstaking attempt to found an entire hypothesis on the supposition that the writing is hiding an Indo-Aryan language is set aside as untenable, and Mr. K. P. Jayaswal's attempt to prove that the so-called inscription on a rock-shelter at Vikramkhola in the Sambalpur District of Bihar and Orissa supplies a connecting link between Indus Valley pictograms on the one hand and the Brahmi characters on the other, though more interesting, is found to be "similarly open to grave doubts." Indeed, Dr. Fábri doubts that it is an inscription at all. "Yet the possibility cannot be denied that we have here some primitive 'rural' writing; vaguely connected with the Brahmi of the courts and temples. It is to be feared, however, that it would be in vain to expect a clue from that side to the Indus Valley characters." Sir Flinders Petrie's attempt to interpret all the texts on the seals as titles of officials does not carry conviction, for "if all the seals had belonged to officials, then almost every inhabitant of Mahenjo-daro must have been an official personage." Dr. G. de Hevesy's identification of over 200 signs of the Mahenjo-daro script with the Easter Island script is an astonishing discovery which Dr. Fábri thinks, "must be accepted, unless it be an amazing historical accident." The author informs us that Baron von Heine has attempted to connect the Easter Island script with the

Mohenjo-daro pictograms by a thorough examination of the most ancient Chinese signs. Herr P. Meriggi's suggestion that the single and double "accents" (*i. e.*, | and ||) are really word-dividing signs, if accepted, "would be a discovery of great assistance for further work;" and his reading of the genetive ending is regarded by the author as very suggestive. Dr. G. R. Hunter's volume on *The script of Harappa and Mohen-jo-daro* though not so ingenious, is a work of patient research in which he compares the Indus valley signs with Egyptian, Proto-Elamite, Sumerian, Brahmi, South Semitic, Phœnician, and Cypriote writing. But, like Prof Langdon, he is firmly convinced of the derivation of the Brahmi characters from the Indus signs. Dr. Fabri says, "I have never seen less convincing material brought together than in these tables of Dr. Hunter." Finally, in Mr Gadd's *Seals of Ancient Indian Style found at Ur*, there is a collection of not less than eighteen seals of the Indus valley style, found at Ur, Kish, Tell Asmar, and other places in Mesopotamia, with Indus Valley inscription, and differing only slightly, now and then, in design. And it may be expected that "the soil of Mesopotamia from which these eloquent remnants of an ancient trade-relation were excavated, will one day give us the clue to the signs of the Indus Valley," perhaps through some bilingual inscription which may "turn up one day under the spade of some excavator in Iraq."

In the same number of *Indian Culture*, Mr. B. C. Law gives a succinct account of the Pre-

Musalman History of the Vangas or the Bengali people and their country, as has been so far ascertained from epigraphical and other data.

In a suggestive note on *A New Brāhmaṇ Dynasty*, Mr. Jogendra Chandra Ghosh points out that the Odmbara coin of Dharmaghosa, who is taken by the author to be a Brāhmaṇ prince of circa 100 B. C., probably a feudatory of the Kanva sovereigns, appears to have *udumbara* or the fig for his totemic clan name, and the platform (*vedi*) figured underneath the tree on the coin indicates that the fig tree was an object of veneration to the dynasty. The articles on the *Non-Vedic Origin of the Sāṅkhyan system of thought* and the *Banner of the Jinas and its use*, and *The Origin of Hindu Temple*, are also of interest to the student of Anthropology.

In the *Indian Culture* for October, 1934, Dr. C. L. Fabri contributes a paper on *The Ancient Hungarian Script and the Brāhmī Dialect* in which attention is drawn to certain resemblances between the two scripts; and Dr. S. K. De writes on *Chaitanya-Worship as a Cult*. It is pointed out that not only has Chaitanya's identity with Krishna put forward by the earlier Gosvāmis been accepted by his followers but also that from the fact of Chaitanya's fair complexion and display of ecstatic feminine emotions a theory of dual incarnation has been developed by the later Gosvāmis. Mr. G. P. Majumdar gives a succinct account of *Dress and other Personal Requisites in Ancient India*, in which attention is confined to ancient India's indebtedness to the vegetable king-

dom for the materials of clothing and personal beautification; Dr. D. R. Bhandarkar continues his *Notes on Ancient History of India*; Mr. Md. Emanuel Haq contributes a note on *The Sufi Movement in India*; Mr. Nihar Ranjan Ray contributes a note under the caption, "*Were the Maukhāris Malavas? Were the Malavas an Ethnic Type?*" and answers both the queries in the affirmative, and refers to certain ancient Sanskrit text indicating that "men, obviously of India, are divided into five standardized types; Harisa, Bhadra, Malavya, Ruchaka, and S'as'aka, for purposes of artistic representation;" Mr. A. K. Sur, in a note headed "*Who were the Authors of Mohenjo-Daro Culture?*" criticises the views of Marshall and Guha as based on insufficient data of dubious value; Dr. B. C. Law continues his *Notes on Tribes of Ancient India*. Mr. B. M. Bsrna suggests reasons to regard the *Bodh-Gaya Plaque* depicted on the cover of the *Journal of the Bihar and Orissa Research Society*, as spurious and having "an air of underoity about it;" Mr. D. C. Sarkar contributes a note on *Asvamedha*.

In the *Indian Journal of Medical Research*, vol. XXI, No. 3, January, 1934, Mr. S. R. Pandit contributes a paper on *Blood-Group distribution in the Todas*. In this paper, an attempt is made to study the blood-group distribution among the Todas of the Nilgiri Hills. This study was undertaken in course of an investigation about their health under the auspices of the King Institute, Guindy. The total population recorded at that time was (according to the *Census of 1931*,) 597 but among them only 200

individuals were "grouped." The results are given in the following table :—

	No. Exam.	O	A	B.	AB.	p	q	r
Todas	200	29.5%	19.5%	38.0%	13.0%	17.8%	30.0%	54.3%
Dravidian type of Malone and Lahiri, <i>Ind. Jour. Med. Re- search</i> , xvi., pp. 963-968, 1928.	589	24.3%	27.5%	36.8%	11.4%	21.9%	28.1%	49.2%

In *L'Anthropologie*, Tome XLIV, Nos 1-2, 1934 a report has been published of two important communioatios made by M. Lapieque before the "Institute Francois d' Anthropologie" at a meeting held on 17th May 1933. The subject of his first communication was "*les habitations dans les arres dans le Sud de l' Inde* (Tree-houses in the South of India) in which he gave an account of the existence of tree-houses among the Mandowers, a tribe living in the valley of Kadamparai in the Anaimalai Hills. In the second he deals with "*les amas coquilliers aux Andaman*" (The shell-mounds or kitchen-middons of North Annam, recently described by M^{lle} Collani) and Andaman Islands. The etone implements and pottery which M. Lapique collected from the kitchen-middens of Andaman Isles are now preserved in the Museum of Trocadéro.

In the *Journal of the Andhra Historical Research Society* for April, 1934, Mr. M. Rama Rao contributes a paper on *Libraries in Ancient and Medieval India*.

NOTICES OF BOOKS.

Yuman Tribes of the Gila River. By Leslie Spier. (University of Chicago Press.) pp. XVII-433. Price \$ 4. 00.

This interesting volume is the result of field-work among the Maricopa tribe of the Gila River, undertaken by the author under the auspices of the Yale University and the University of Chicago. The descriptive part of the account given in the book applies particularly to the Maricopa tribe and references to other tribes of the Gila River are only incidental. There are two Maricopa communities at the present day, the larger community in the Gila confluence numbering under three hundred individuals, and there is a smaller community on the south bank of the Salt river. Actually the "Maricopa" consist of five Yuman tribes who have intermarried though several generations, so that to-day they form tribally unsegmented communities of the Maricopa speech. Little of their ancient culture remains, so that now modern rural conditions prevail. The ancient dress, houses, and implements have disappeared, but cookery is not entirely transformed, a few gourd rattles survive, quantities of pottery are yet made by the ancient process. Non-material elements have, however, survived to some degree. But dances have been long forbidden, with shamanism, and the old songs have disappeared except only a few fragments. Yet the old religious outlook survives

and few of them are Christians. The younger people are said to incline towards agnosticism. The sib system and its attendant naming habits is the most flourishing part of the old thought system, although this too is beginning to disintegrate. The old culture persists best in every day behaviour, manuerisms, sayings, personal relations, and speech.

This volume is a valuable contribution to our knowledge of the American Indian of the United States.

Science and the Spirit of Man:—A New Ordering of Experience. By Julius W. Friend and James Feibleman. (Allen and Unwin, 1933). pp. 336. Price 12 s. 6 d. net.

This is a most thought-provoking and illuminating work. The authors begin in Chapter I, with a logical examination of the current metaphysics, and attempts to show that it is confused, unfounded and untenable, that it over-looks, slights, slurs, and demotes the essential human values. In Chapter II the authors exhibit how the present world-order arose historically out of the orders of the ancient and medieval worlds, and demonstrate the historical necessity for a fresh world-order in which man should be the centre of the world. In Chapter III, by an examination of modern physics the authors show that its concepts, properly understood, undermine the metaphysical presuppositions of the current

world-order, and at the same time indicate the metaphysics for a new world-order. In Chapter IV, the authors discuss in the light of the authors' metaphysics, modern psychology of different schools (Functional or introspective psychology, Behaviourism and Freudian psychology, etc.). "It is the acceptance of life as above all a search for significance, guided by the right use of reason that makes man change from one cosmology to another. The modern cosmology has outlived its usefulness because its hardened concepts stand in the way of this quest." In the final chapter the author discusses the true, "the good, the beautiful and the worshipful which are terms to denote ideal values, reflections of infinite value." Inasmuch as the quest for the infinite is ultimately unmeaning, man can grasp only finite objects which participate in these aspects of value. In experience, then, the good object, the beautiful object, and the worshipful object, are the closest approximations to infinite value. These are the most significant finite modes which value takes; there we call them the forms of final causation." (p. 261). "To desire among goods the greatest good which is the most desirable, thus to be truest to the self; to prefer among beautiful things the grander beauty, thus to weigh objective things most truly; to worship that only which reflects infinite value, thus to seek the truth; and by all this to increase the self with whatever it can be brought to include, and to spread the self as far beyond itself as possible—this is

the good life, ordered according to the hierarchy of values. If the progress of mankind means anything, it must mean living constantly nearer this hierarchy, with the human spirit allowed to adventure toward higher and more inclusive legends; it cannot be known how far mankind may attain to what is now impossible" (p. 329). The authors very pertinently point out that "the artist is truly both seer and precursor" in man's effort to integrate experience and merge with the infinite. The book will be particularly appreciated by Indian scholars as its central thought is in consonance with the philosophic Hindu ideas of the "ordering of experience."

Races and Ethnic Groups in American Life.

By T. J. Wooster, Jr. (McGraw-Hill Book Company, Inc. 1933). pp. xii + 247.

This volume is one of a series of monographs published under the direction of President Hoover's Research Committee on social trends, founded in 1929, to survey social changes in his country "in order to throw light on the emerging problems which now confront or which may be expected to confront the people of the United States." In this volume the author has marshalled exhaustive statistical and other material, on the basis of which he has discussed the most outstanding trends in the ethnic pattern of American life and attempted to trace "the inter-relationship of these trends and their effect on the whole racial composition and race-psychology of the United

States." The base lines from which the trends of the past twenty years are measured are—(1) a growing immigrant population; which numbered 13 million in 1910; (2) a relatively stable Negro population increasing more slowly and located mostly in the South-east and numbering nearly 10 million; (3) a small and slowly increasing Indian population segregated in reservations; (4) an Oriental population largely confined to the Pacific States; and (5) a small Mexican population confined to the border counties. The author finds that prejudice of one group against another usually varies with the population ratio, the extent of physical difference, and the extent of economic competition between the two. It is also found that prejudice against foreigners generally becomes more or less inactive as they are assimilated, but yet a considerable latent mistrust remains and is intensified from time to time by propaganda and organization. The following pre-requisites of co-operation are indicated: (1) The individual pre-requisite of a sufficient amount of individual good will to leaven the groups. (2) Then, mutual group acquaintance arrived at through an appreciation of special abilities of differentiated groups. (3) Thirdly, a realization of mutual interests arrived at through the realization of mutual dependence.

Besides its general interest to sociologists everywhere, the book is one of particular interest as much to the people of the United States as to those of India where, too, communal and racial jealousies constitute a problem.

Ancient Architecture. *Prehistoric—Egyptian, Western Asian,—Greek and Roman. A Commentary in Verse.* Written and Devieed by Chester H. Jones. (B. T. Batsford, Ltd, London, 1933) pp. xvi+208.

This is a delightful book on the biotory of Architeotnre which the gifted young author (whom unfortunately death carried away at the age of 27 before the publication of the work) wrote in verree "for his own amusement and for the pleasure of his friende," during his academic yeare in the School of Architecture of the University of Pennsylvania. As Sir Edward Luteyns in his Foreword to the volume saye:—"I know of no book on architectural biotory that stimulatee the interest and imagination in so agreeable a menner...The witty pages convey essential facts and principles of architecture and give a vision, too, of life in hy-gone daye fer more illumineeting than many a weighty volume filled with encyclopædio facts and photographs. The drawinge epeak for themselves as only drawings can. The maps revel in charm and delight in their statement of fact and explanation. The technique merches level with his mature and measured expression. He brought meticulously critical powers to beer on each and every detail of its presentation, and there is no touch but represents something of his eager lovable temperament and points to the ability that pertains to a great artist."

The Last of the Taboos: *Mental Disorders in Modern Life*—By Isabel E. Hutton, (Heinemann, 1934) pp. xiii+204. Price 6 s. net.

In this book the author, who has had "many years of experience in dealing with patients suffering from mental disorders of every form and degree," seeks to give a simple outline of the various maladies included in the term 'insanity,' together with means for their prevention and treatment. A chapter is also devoted to mental deficiency, and another to sterilisation. Chapter IX deals with the Legal Aspects of Mental Disorders. This little book written by a Honorary Physician of the British Hospital for Functional, Mental and Nervous Disorders, should prove helpful to non-medical readers.

History of Anthropology.—By Dr. A. C. Haddon, (Watts.) pp. xiv+146. Price 1 s. net.

This second edition of the standard, in fact the only, book in English on the History of Anthropology will be welcomed by all students of the Science of Man. Their only regret will be that the scope of the work has not been widened, and its contents have not been amplified, and more extended treatment not accorded to some eminent writers. Much as students of anthropology are indebted to Dr. Haddon for this most valuable little book, they will naturally wish to be placed under a still deeper debt of gratitude by the publication of a Larger History of Anthropology for which

task no one is better qualified than the distinguished author of the work under review.

The Ape and the Child. *A Study of Environmental Influence upon Early Behaviour*—By W. N. Kellogg, and L. A. Kellogg. (McGraw-Hill Book Company, 1933). pp. xiv + 341, price 12s. 4d. net.

This fascinating volume records the results of a most interesting experiment made by Prof. Kellogg of the Indiana University and Mrs. Kellogg. Their own son Donald, ten months old, and a chimpanzee female Christend 'Gna,' 7½ months old, born in captivity and reared by her mother, were made to live together as companions and playmates in the same house and human surroundings. During the nine months that the experiment lasted, the child and the ape were given practically the same human treatment and were patiently compared in minute details at every step of their progress by a variety of tests and experiments. Their responses to the same stimuli were noted and their growing intellectual abilities tested. It was found that 'Gua' learnt to respond by appropriate behaviour to a large number of words, surpassing in the beginning Donald in this respect, and could even indicate by gestures and a special sound when she anticipated the need of being taken to the nursery—"chair." The authors have succeeded in making the account easily comprehensible and quite interesting to the lay reader, without the sacrifice of scientific accuracy.

Children of the Yellow Earth.—*Studies in Prehistoric China.* By J. G. Andersson. (Kegan Paul, 1934). pp. xxi+345. Price 25s. net.

In this volume the author gives a popular and highly interesting account of his own important archaeological discoveries in China and a full narrative of the opening of the Chou K'ou Tien cave which yielded the remains of *Sinanthropus Pekinensis*, one of the relics of earliest man. In the concluding chapters of the book, the author describes the fecundity rites, hunting 'magio,' death cult, and the symbolic significance of certain shells (Aphrodite's symbol), the symbolism of the design on the burial urns of the graves in the P'an Shan mountain; and finally the Yang-Shao civilization. The author brings out clearly the successive changes in the topography of northern China and the continuity of human development from the opening of the Pleistocene period onwards.

Indian Religion and Survival:—A study, By Mrs. Rhys Davids. (Allen & Unwin 1934). pp. 94. Price 3s. 6d. net.

Few scholars have contributed more to the elucidation of Buddhist doctrines and beliefs than Mrs. Rhys Davids. This little book is "an expansion, with revision," of an article on "Rebirth in the Pali scriptures" contributed by our author in the *Calcutta Review* for September, 1930. In it the Buddha's contribution to Indian religious

thought is analysed and summed up. It is shown how the nascent Buddhist movement expanded a dim faith in transmigration and rebirth associated with early Indian religious beliefs into a conviction of vital interest for every man, how this faith "waned under the predominance of monastic ideals, in which the value in 'lives' as opportunity in 'becoming' or growth was exchanged for "a dis-value in 'lives' as prolongers of misery;" and, how, "as a result of this change, Indian religion has inherited a tendency to show to man a less in life and destiny rather than a more."

The Social History of Kamarupa, By Nagendra Nath Vasu, Vols I-III. (Visvakosh Press, Calcutta 1922-33) Price Rs 5/- per volume.

In these volumes the accomplished author has collected, collated and systematised all available materials regarding the social history of Assam from the earliest times to the present day. They not only constitute a mine of valuable information regarding the social history of Assam but also throw interesting side-lights on some obscure points in the social history of the neighbouring province of Bengal. Though a few of the sociological arguments and conclusions or inferences of the author may not appeal to all students, there can be no question that the volumes before us form an invaluable contribution to Indian historical and sociological literature.

The Fear of the Dead in Primitive Religion ; Vol. II. By Sir James Frazer, Macmillan, 1934). pp. X+151. Price 10 s. 6 d. net.

This volume contains the second course of lectures on the subject delivered by Sir James Frazer on the William Wyse foundation at Trinity college, Cambridge. In the first course of lectures the author pointed out that primitive man attempts to get rid of the dangerous spirits of the dead by one or other of two methods, either the method of persuasion and conciliation or the method of force or fraud. In the present course of Lectures the method of force is mainly dealt with.

It is shown, by a wide range of examples impartially collated and systematised, how primitive man attempts to drive away the spirits of the dead by sheer physical force, and to keep them at distance by interposing barriers such as barricades, water, fire, and other physical obstacles between him and them, and also by such other devices as mutilating and maiming the corpses, changing the names of the surviving members of the deceased's family, and so forth. The method of fraud or deception, though incidentally illustrated, has been reserved for fuller treatment in a subsequent work. Though the animistic interpretation of a few of the customs cited in the volume might conceivably have been absent, or only perhaps latent, in the minds of those who observe the customs as such, the wealth of well authenticated material labouriously collated and systematically marshalled in the volume and illumi-

nated by the suggestive comments of the distinguished author, will long make these Lectures the standard work on the subject. Sir James Frazer has been of all masters of anthropology the least dogmatic and has always premised the provisional character of his hypotheses.

New Light on the Most Ancient East :
The Oriental Prelude to European Prehistory. By
 V. Gordon Childe. (Kegan Paul, 1934). pp. xviii +
 327. Price 15 s. net.

This valuable work of the author published in 1928 (*Most Ancient East*) but consisting mostly of new material brought to light by recent revolutionary discoveries in Egypt, Assyria, Babylonia, Persia, and last, but not the least, India, provides us with a lucid survey, fully illustrated, of the prehistoric and protohistoric archaeology of the Ancient East as an indispensable prelude to the true interpretation of European pre-history. This pre-history, as the author says, "is at first mainly the story of the imitation, or at least adaptation, of Oriental achievements," of the three most ancient civilizations of the world the Egyptian, Babylonian and Indian, the Indian (Indus Valley Civilisation) being, as, the author says "the peer of the rest." "India confronted Egypt and Babylonia by the third millennium with a thoroughly individual and independent civilization of her own, technically the peer of the rest. And plainly it is deeply rooted in Indian soil." The area embraced by the Indus civilization must

have been twice that of the Old Kingdom of Egypt and probaaly four times that of Sumer and Akkad. The Indus economy, like the Egyptian and Babylonian, rested on irrigation-farming; and the secondary industries of the Indus valley are parallel to those practised on the same date (the 3rd millenium B. C.) on the Euphrates or the Nile, but the treatment of the material is different, and in some respects the Indian craftsman was ahead of his Sumerian or Egyptian fellows, "The Indus civilization represents a very perfect adjustment of human life to a specific environment, and can only have resulted from years of patient effort. And it has endured; it is already specifically Indian and forms the basis of modern Indian culture." According to our author, "an expansion of Asian culture seems the only possible explanation of the Gerzean culture in Egypt; to reverse the process as Perry once desired, is now impossible." And as for the pre-Gerzean cultures of Egypt (Amratian, Badarian, and Tasian), our author says, "At the moment it looks as if the archæological record began with two irreducible cultural provinces (Egypt and Asia)." The purpose of the present work, the author tells us, has been primarily "to illustrate and, if possible, vindicate the principles that must be applied to the etudy of European prehistory by reference to the richer and better-dated material of the proto-historio Orient." And we think the author has amply fulfilled his purpose.

Outlines of Buddhism:—*A Historical Sketch.*
By Mrs. Rhys Davids. (Methuen, 1934). pp. ix + 177. Price 5 s. net.

This inspiring little book is not a summary of previous treatises on Buddhism, but it seeks to make a little more clear the fundamental teaching of the Buddha,—“the original message of the Son of the Sakyas.” That message is to bring to man “a new More than he is, or has as yet seen or willed, a new Better in which to become, a new glory in the beyond.” This More, this Better, lies not in formulas, nor in interpreting the old by the new. Buddhism shows that the God-in man “is realizable, not by gnosie and ritual, but in conduct which has to be brought into relation between man and his eternal destiny.” “Man’s being is more truly a becoming; and only in and by becoming a More, will he attain to an actual, not a potential, Most.”

The General Theory of Evolution:—By Malcolm MacTaggart. (*Heffer, 1933*). pp. 50. Price 1 s. 6d. net.

In this apparently quaint but stimulating little book, the author’s central idea may be indicated in the author’s own words as follows:—Historically, the concept of evolution came first, and the facts which lend it tangible support came afterwards. *How* and *Why* are related to each other as positive contradictions or polar opposites. Nothing possesses the least degree of meaning except

by its implicit qualification by such an extremist possible opposite—just in the same way that ‘yes’ is meaningless but for a co-valid positive ‘no’. The science of Polarity is the knowing of meaning.

Thus, if we consider the evolution of the cell we find that the cell must split throughout itself in such a manner that the split passes through the cell nucleus, when we may say that the two resulting cells have like (purely different) wants, and also they have come about by the same *how*. But the meaning of the cell is conceivable in terms of the polar opposite *how* to the differing *why*, namely the terms of *how* uniting within itself. There is yet only one event possible to satisfy this condition: cells which have been formed by splitting must coalesce into groups wherein they will want the same. The same *why* will be by the like *how*. Now, meaning is thus identical with the concept of *adaptability*. Adaptability is the possible coincidence of incompatible standards of Truth, and, in the instance of the cell, is between the cell and the atoms and molecules included by it. Sooner or later by the differing of adaptability and by the differing of chance, the ‘last straw’ to adaptability is reached, and the adaptive relation, wherein *how* and *why* are united, is strained to the logical breaking-point. We describe this condition by saying that the cell dies.....It is purely by the same principle (on which complex organisms unite within themselves) that *cells ex* molecules unite within cells *cum* molecules, and by this unity the

balance is readjusted between *how* and *why*. This is the theory of *reincarnation*, which though logically is a much more United speculation than its religious adherents have mooted, is neither more nor less than the generally familiar and commonplace concept of belief. *Belief* is the difference between the polar opposites of possibility and probability, wherein possibility (the concept of the alternative) and probability (doubt) are united. The polar opposite of belief is the concept of *trust* or *faith*, and the difference between belief and trust, wherein belief and trust are united, is the concept of *impartiality* or *detachment*. Belief is a difference, and hence must differ.

The key-principle of evolution is thus visualised by the author:—"No law can be a law unless there is also a tendency to transgress it. A law purely is that which brings otherwise unrelated identifiabiles within one expression of unity. But the transgression of a law must lead to a further law to cope with the transgression. Otherwise the Universe would be inconceivable, since ultimate unity could be departed from. Equally would ultimate diversity be inconceivable, since it is the polar opposite to ultimate unity. Ultimately, therefore, *the* law, as opposed to *a* law, is *the* law which is transgressed by obedience to *a* law, and obeyed by transgression of *a* law. We transgress a law when we render it unnecessary—that is whatever can *unite within itself*—can evolve itself... .. This *law of the transgression of unities*—as it is appropriate to name

it—leaves the matter in no doubt—that our further evolution is possible only by the positive activity of uniting within ourselves in terms of some concept whereby we shall transgress a corresponding enactive unity.. Except by uniting within ourselves in terms of *trust* or faith, we shall not be capable of evolving further." The practical upshot is inexorable in its direct simplicity, it stares us in the face: *unite in trust—trust and be trustable*. Let there be no mistake about the meaning of trust...*Belief* rests upon evidence; *trust* cannot rest upon evidence. Trust is trust in human nature— in our own nature— and to this there can be no possible alternative... Impartiality is the difference between trust and belief, wherein trust and belief are united." Impartiality consists in doing unto others as you would they should do unto you. "It is not possible to build a sound structure of human relations on the foundation of distrust and all distrustability."

Kingship Through the Ages. (*A Historical Survey*). By P. S., Ramakrishna Iyer, (Ernakulam, 1933) pp. 180. Price Rs. 2 or 3 s.

In this book we have a succinct account of the evolution and history of Kingship in eight chapters headed as follows:—I. The Origin of Kingship; II. Kingship in Ancient India; III. Kingship in Ancient Greece and Rome; IV. Medieval

Kingship in Theory and Practice; V. The Age of Absolutism; VI. The Anti-Monarchist Currents of the Age of Absolutism; VII. The Progress of Constitutional Monarchy; VIII. A few General Observations. So far as it goes, the account given in the book is fairly accurate, and the comments and inferences appear to be, on the whole, just and probable.

Rigveda-Samhita :—Parte I—III. Published by *Satis Chandra Seal, M. A., B. L., Hony. Secretary, Indian Research Institute. (Calcutta, 1933). Price Rs 1/8- inland, and 2 s. foreign.*

The Indian Research Institute has placed students of comparative Religion in general and of the Rig-Veda in particular, under a deep of gratitude by undertaking this variorum and eminently scholarly edition of the Rigveda. The first three parts of the work mark a very high level of scholarship and editorial efficiency. And if, as we expect, the same high standard is maintained in subsequent volumes, the Indian Research Institute will have rendered invaluable service to the cause of Vedic studies.

The purity and accuracy of the text has been sought to be attained after patient industry and accurate critical comparison. The Padapīṭha and Sayana's commentary have been incorporated, and the editors' comparative, critical and explanatory

notes on these and other commentaries, indigenous as well as foreign, are marked by lucidity and terseness.

The English, Bengali and Hindi translations which appear to be lucid and accurate make the work very helpful to those who are not at home in Vedic Sanskrit. The omission, in part III, of the Bengali translations of the *Mantras* is inexplicable unless it is due to the printer's inadvertence or the book-binder's carelessness. It is to be hoped that this omission will be supplied in the next part, and all subsequent parts will contain Bengali translations of the *Mantras* as well as the commentaries.

We have no hesitation in saying that this splendid publication deserves the unstinted patronage of all lovers of India's ancient religious lore and intellectual heritage. And we eagerly look forward to the successful completion of the work as speedily as may be possible in the circumstances.

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Errata.

We regret that a number of misprints crept into the second portion of the article entitled *Food and Drink in Ancient India*, which appeared in No 1. vol. XIV. of this Journal (pages 15-38). They are corrected below—

Page	Line	For	Read
16	20	purodāsa	<i>puroḍās'a</i>
"	29	pāyas	<i>payas</i>
17	7	Sanjans	<i>Aryans</i>
"	15	Nemba	<i>Nimba</i>
"	15	<u>Malia</u>	<u><i>Melia</i></u>
18	8	tasī	<i>Atasī</i>
"	10	Bhavisya Purāṇa	<i>Bhāvaprakās'a</i>
"	32	Kala lavaṇa ;	<i>Kala-lavaṇa,</i>
19	2	mealing	<i>heating</i>
"	11	Ajaje	<i>Ajāji</i>
"	15	<u>Antomisia</u>	<u><i>Artemisia</i></u>
"	16	<u>Ocrymum</u>	<u><i>Ocymum</i></u>
"	27	Nārī	<i>Naḍī</i>
20	2	Charaka	<i>Choraka</i>
"	9	<u>subscastamum</u>	<u><i>bulbocastosmus</i></u>
21	6	<u>vedgaris</u>	<u><i>vulgaris</i></u>
"	9	<u>Gruvia</u>	<u><i>Grewia</i></u>
"	10	Ph.atamla	<i>Phalām̐la</i>
"	12	misreadin fo vidala which Manu mentions.	} <i>variant of Vidula of Amarakosha. Manu mentions</i>
"	20	Lavati	<i>Lavate</i>
"	24	Karkandhan	<i>Karkandhu</i>
"	27	Kosarar	<i>Kos'amra</i>

22	31	'haritake'	'haritaka'
23	22	<u>gone</u>	<i>goose</i>
28	18	Nandia	<i>Handia</i>
29	31	<u>Sonseviera</u>	<u>Sansviera</u>
30	26	<u>rorburghiana</u>	<u>rozburghiana</u>
31	9	Putraka	<i>Putraka</i>
„	13	Coca	<i>Chocha</i>
„	14	<u>Embelia</u>	<u>Emblica</u>
„	21	'Vijabandha'	'Vijabandha'
„	32	Pistika	<i>Paishika</i>
33	8	<u>Achyranthis</u>	<u>Achyranthis</u>
„	16	liquors	<i>liqueurs</i>
„	17	amla-sidhan	<i>amla-s'idhu</i>
34	17	Ganfi	<i>Gandi</i>
35	23	Tanka	<i>Tanka</i>
38	22	<u>Impure guṛa</u>	<i>Impure guḍa</i>

BOOKS FOR SALE.

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1. ORAON RELIGION AND CUSTOMS.

By RAI BAHADUR SARAT CHANDRA ROY, M. A., B. L., M. L. C.
Price.—*Twelve Rupees.*

SOME OPINIONS ON THE BOOK.

Col. T. C. Hodson, M. A., *Reader in Ethnology in the University of Cambridge* :— "A book like this—sane, clear, scientific, sympathetic, comprehensive—is of prime importance to the student of Anthropology, to the student of Religion and to the Administrator who seeks or should seek to understand the forces which govern human activities, and it is full of charm and interest for the general reader who desires to know something at once accurate and intelligible of the Peoples of India".

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Sir Arthur Keith, M. A., M. D., L. L. D., F. R. C. S., F. R. S., :— "I am very conscious of the great work you have done and are doing. There is no school or college of Anthropology but will make a special place for this your latest work both on its library shelves and in its heart. I doubt if any one has ever done so much for the Anthropology of a people as you have done for the Oraon. I endorse all my friend Col. Hodson has written in his preface and in particular would I underline your disinterested and persistent labour for the advance of Science".

Dr. Roland B. Dixon, A. M., Ph. D., *Professor of Anthropology in the Harvard University, Cambridge, Mass.*, :—

I was delighted to get your recent book on *Oraon Religion* and have reviewed it for the *American Anthropologist*. The

book carries on the high standard which you have set in your previous works, and presents the material in a very effective form. I congratulate you on it most cordially.

The Times (London, February 23, 1929):— A very detailed account of the religion and magic of the Oraons of Chota-Nagpur, a people of Dravidian speech. It is based on twelve years' investigation by a highly competent ethnologist, who has already published a work on this people. It can be seen what a rich field there is in India among the more primitive peoples, which, indeed, can best be tilled by trained Indian ethnologists. There is a long chapter also on movements during the last hundred years and more among the Oraons towards a higher, simpler religion, which will interest students of religious psychology.

The Nature (London, March 9, 1929):— Ethnologists are indebted to Sarat Chandra Roy for his valuable book "*The Oraons of Chota-Nagpur*" (1915), and now he has provided a study of *Oraon Religion and Customs* which should be read by all those who are interested in primitive religions. The especial value of this book is not merely in the detailed accounts of socio-religious and religious rites and ceremonies and magical practices, but in the very suggestive religious transformations that have occurred since the Oraons arrived, and the process is still continuing.

The Discovery. (London, February 1929):— When the history of ethnological study in India comes to be written, the name of the author of this work is least likely to be overlooked. By his own work and by his encouragement of others as editor of the periodical *Man in India*, he has deserved well of his colleagues in anthropology. Sarat Chandra Roy has published here the promised continuation of his studies of the *Oraon* of which the first instalment appeared as long ago as 1915. The author is here concerned only with their religious and magical beliefs, both directly in themselves and in their relation to the *Oraon* social institutions, such as are involved in birth, marriage and death. Of particular interest to students of folklore and primitive religion are the sections dealing with agricultural ceremonies and the belief in witchcraft which afford much useful material for both comparison and contrast with European folklore.

A final chapter deals with revival movements and modern tendencies in Oraon religion which is highly suggestive and deserves the careful attention of all who are in any way interested in or connected with the problems of administration among peoples of non-European culture.

The Statesman (Calcutta, March 17, 1929):— The Rai Bahadur is wellknown for his excellent monographs on the *Mundas* and the *Oraons*, and is everywhere recognized as an anthropologist of rare insight. India, with its great variety of races, nationalities, creeds, customs, and cultures affords an excellent field for the anthropologist and sociologist. This new book will be studied with delight by scientists in many countries. The author has made a capital use of his opportunities of studying the several tribes of aborigines in Chota-Nagpur and Central India.

The Forward (Calcutta, February 19, 1929):— The learned author is a pioneer in the field of anthropology and needs no introduction. His previous works— *The Birhors*, *The Mundas* and *The Oraons* are classics and had already established a world-wide reputation for him. The present volume is a befitting successor to his previous works. It is the outcome of the authors deep and laborious investigations into the religion and customs of the *Oraons*, a much-neglected tribe of Chota-Nagpur, carried on for a long period of about twelve years and as such an invaluable treasure to students of anthropology and students of religion.

The get-up of the book is excellent. In short, the book leaves nothing to be desired.

The Servant of India (Poona, May 30, 1929):— The book is worthy of the author, Rai Bahadur S. C. Roy of Ranchi who is a well-known student of anthropology relating to the aboriginal tribes of Chota-Nagpur and the Central Indian Plateau.

The chapter on socio-religious rites and ceremonies is very interesting and demands careful study. The last chapter on the *Oraon Religion* with its revival movements is exceedingly instructive.

We strongly recommend the book to students of anthropology as well as to the general reader.

The Modern Review (Calcutta, January, 1929).— Rai Bahadur Sarat Chandra Roy is one of the few Indians who has shown a keen interest in the study of the primitive folks

of this country. In fact, the works that he has already published have earned for him the reputation of being our foremost authority on the aborigines of Chota-Nagpur. The present volume on *Oraon Religion and Customs* is the sequel to his earlier work on *The Oraons of Chota-Nagpur* (1915). In it the Rai Bahadur has given an exhaustive account of the religions and social institutions of this interesting tribe, the result of close personal observation and intimate acquaintance spreading over a period of twenty years. He has analysed the Oraon beliefs into their purely religious and magical sides and has described the customs and rites associated with the chief crises of life. As an authoritative treatment therefore of Oraon life in all its phases, including some of the modern tendencies, his account could hardly be improved.

The book is well-printed and illustrated and the price is moderate for a work of this kind. For students of Anthropology in the Post-Graduate classes of our Universities it should form a very handy and reliable text-book for some of their courses.

The Quarterly Journal of the Mythic Society (Bangalore, July, 1929):— Rai Bahadur Sarat Chandra Roy is too well known in the anthropological world to need any introduction. The publication of a volume on *Oraon Religion and Customs* was foreshadowed in 1915, when his *Oraons of Chota-Nagpur* first appeared. He has since been engaged in the investigation of their religion and customs for well-nigh twelve years, and the results are embodied in the present richly illustrated volume.

The work is full of charm and interest to the general reader who desires to know something of the religion and customs of this interesting people. We have great pleasure in commending this volume to all students of anthropology.

2. THE BIRHORS : *a Little-known Jungle Tribe of Chota-Nagpur.*—By Rai Bahadur Sarat Chandra Roy, M. A., B. L., M. L. C. Pp. viii+608, 36 plates. (Ranchi : "MAN IN INDIA" Office 1925). Price Rs. 10-; or 15 s.

SOME OPINIONS.

SIR JAMES G. FRAZER, D. C. L., L. L. D., Litt. D., F. B. A., F. R. S., O. M., Professor of Anthropology in the Trinity College, Cambridge writes :—

.....I find it characterised by the same high qualities a mark your former monographs on the Mundas and Oraons. You have rendered a valuable service to anthropology by placing on record the customs and beliefs of a very primitive tribe about which very little was known before and which, but for your careful and prolonged observations, might have passed away practically unknown. As in your former volumes I admire the diligence with which you have collected a large body of interesting facts and the perfect lucidity with which you have set them forth. The book is a fine specimen of a monograph on an Indian tribe and must always remain the standard authority on the subject. I congratulate you heartily on your achievement, and earnestly trust that you will continue your valuable investigation and give us other similar accounts of other primitive and little known Indian tribes.

SIR ARTHUR KEITH, M. D., F. R. C. S., L. L. D., F. R. S., Conservator of the Museum and Hunterian Professor, Royal College of Surgeons of England, writes :—

.....You have done a splendid piece of work—one which will make Europe indebted to you.....

DR. A. C. HADDON, M. A., Sc. D., F. R. S., Reader in Ethnology, of Cambridge, writes :—

.....Your accustomed excellent work. It is a most useful contribution to Indian Ethnology.....

DR. ROLAND B. DIXON, M. A., Ph. D., Professor of Anthropology in the Harvard University writes :—

.....You are certainly doing work to be proud of in the studies you have published of the Chota-Nagpur tribes, and all anthropologists are in your debt. If only we could have similar studies of all the wilder peoples of India, how fine it would be !.....

THE NATURE, (London: September 19, 1925):—

.....Students of Indian anthropology are deeply indebted to Mr. Roy for the light he has thrown on the past and present cultures of the Chota-Nagpur plateau. In the *Bihar and Orissa Research Society's Journal* he has opened up new ground in the archaeology of his area. His monographs on the *Mundas* and *Orans* are classics. "The Birhors" is yet another first-rate study, a study not merely of an obscure tribe but also of the workings of that mysterious complex of thought and feeling which go to make up human culture..... Mr. Roy is never a theoriser or a partisan; his diction is simple and precise, his inspiration comes straight from the hearts of the humb folk he has made his friends.

3. THE MUNDAS AND THEIR COUNTRY. With numerous illustrations, and an Introduction by SIR EDWARD GAIT, K. C. S. I., C. I. E., I. C. S., PH. D.

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SOME OPINIONS.

SIR J. G. FRAZER, D. C. L., L. L. D., Litt. D., F. R. S., F. R. S., Professor of Social Anthropology in the University of Liverpool, writes:—

It is a work of great interest and high value as a full and accurate description of an Indian Hill-tribe. I congratulate you on having produced it. You must have given much time and labour to the researches which you have embodied in this book. But the time and labour have been well spent. The description seems extremely clear and well written in the simple language which is appropriate to the theme, and the translations of the poetry are charming.

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SIR EDWARD GAIT, K. C. S. I., C. I. E., Ph. D., J. C. S., formerly *Census Commissioner of India*, writes :—

* * * It is a most valuable contribution to Indian Ethnography.

THE SPECTATOR (London) :— Anthropologists will welcome this careful account of the Mundas : The first part of the book is occupied with a history of the tribe and an attempt at solving the difficult problems that surround its origins. But possibly its most interesting section is the Ethnographical one, in which the tribal customs are described in detail.

(582 End)

4. THE ORAONS OF CHOTA-NAGPUR.—By S. C. Roy. With numerous illustrations, and an Introduction by Dr. A. C. HADDON, M. A., Sc. D., F. R. S.

Price—Eight Rupees.

SOME OPINION.

SIR JAMES FRAZER, O. M., D. C. L., L. L. D., Litt. D., F. B. A., F. R. S. :—

The book is full of very valuable and interesting information. I cordially congratulate you on your success in collecting so much anthropological information concerning the tribe, and on the admirable lucidity and terseness with which you set forth the facts carefully distinguishing them from inferences which you have drawn from them. The inferences seem to me for the most part just and probable.

Your work on the Oraons promises to rank with the very best monographs on Indian tribes.

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